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ABSTRACT

This book is devoted exclusively to the budgeting process in school districts, unlike the more common generic budgeting texts. As such, it allows an in-depth treatment of both conceptual and practical aspects of budgeting in a single volume. By default, school business officials have had to rely on the state education accounting manual as their primary text, supplemented by state department of education memoranda and data, school district budget documents and related materials, individual chapters from books on school business management, and journal articles. This book remedies this situation and fulfills two purposes: to be used as a textbook and as a reference book. As the former, it is intended for use in graduate courses in educational administration for aspiring administrators--particularly those courses in business administration, fiscal management, and school finance. It can also be used as a text in professional development for practicing administrators. As a reference book, it can serve as a source of new ideas, good practices, and useful examples for school administrators. Chapter topics include budget and budgeting, organization for budgeting, accounting as the language of budgeting, building the budget, budget adjustments, marketing the budget, managing the budget, and use of microcomputer models in budgeting. Contains lists of tables and figures. (DFR)

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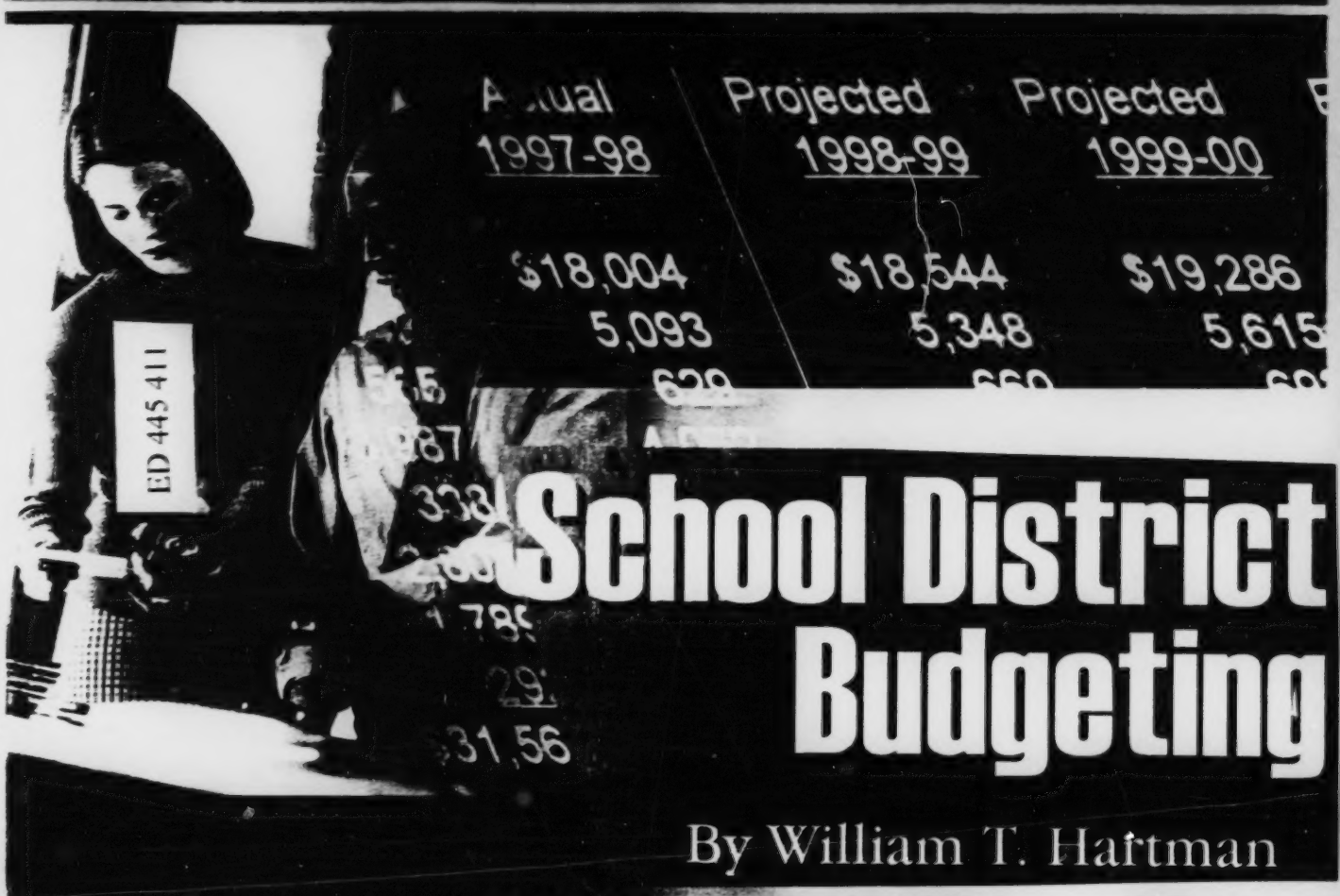

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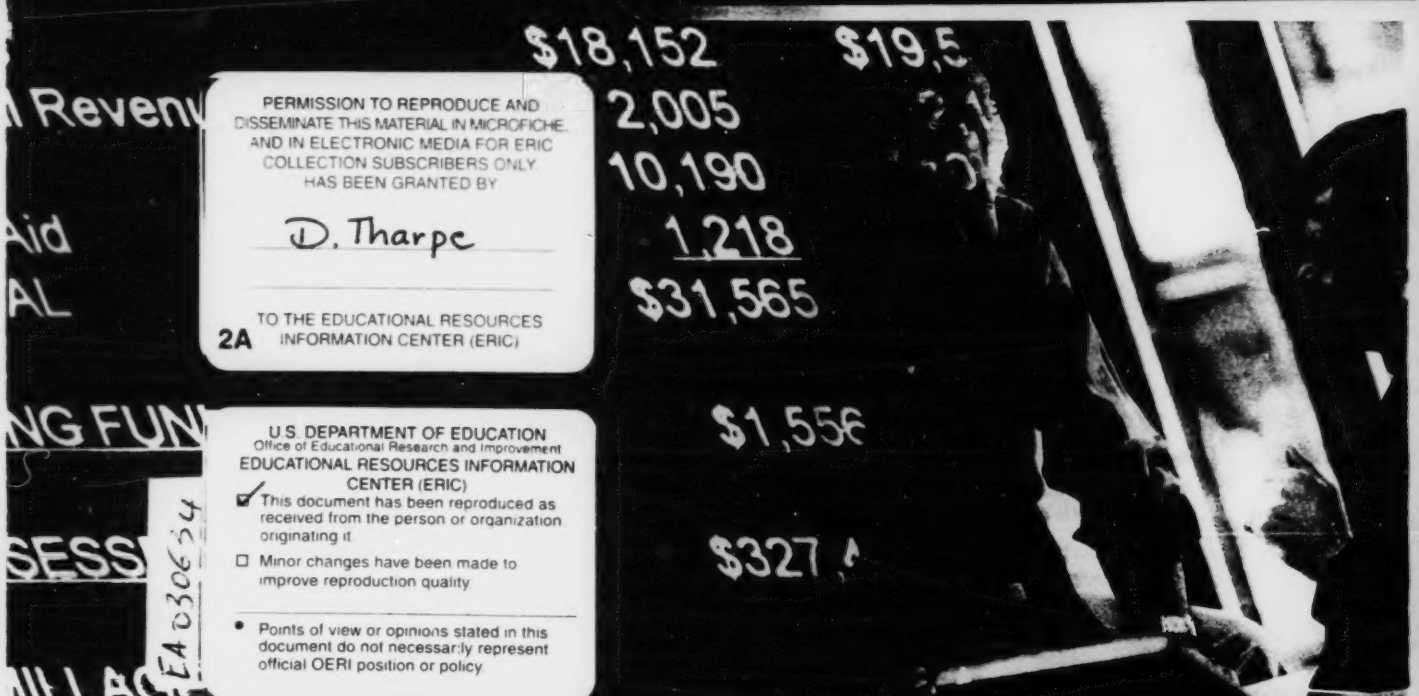
School District Budgeting

By William T. Hartman



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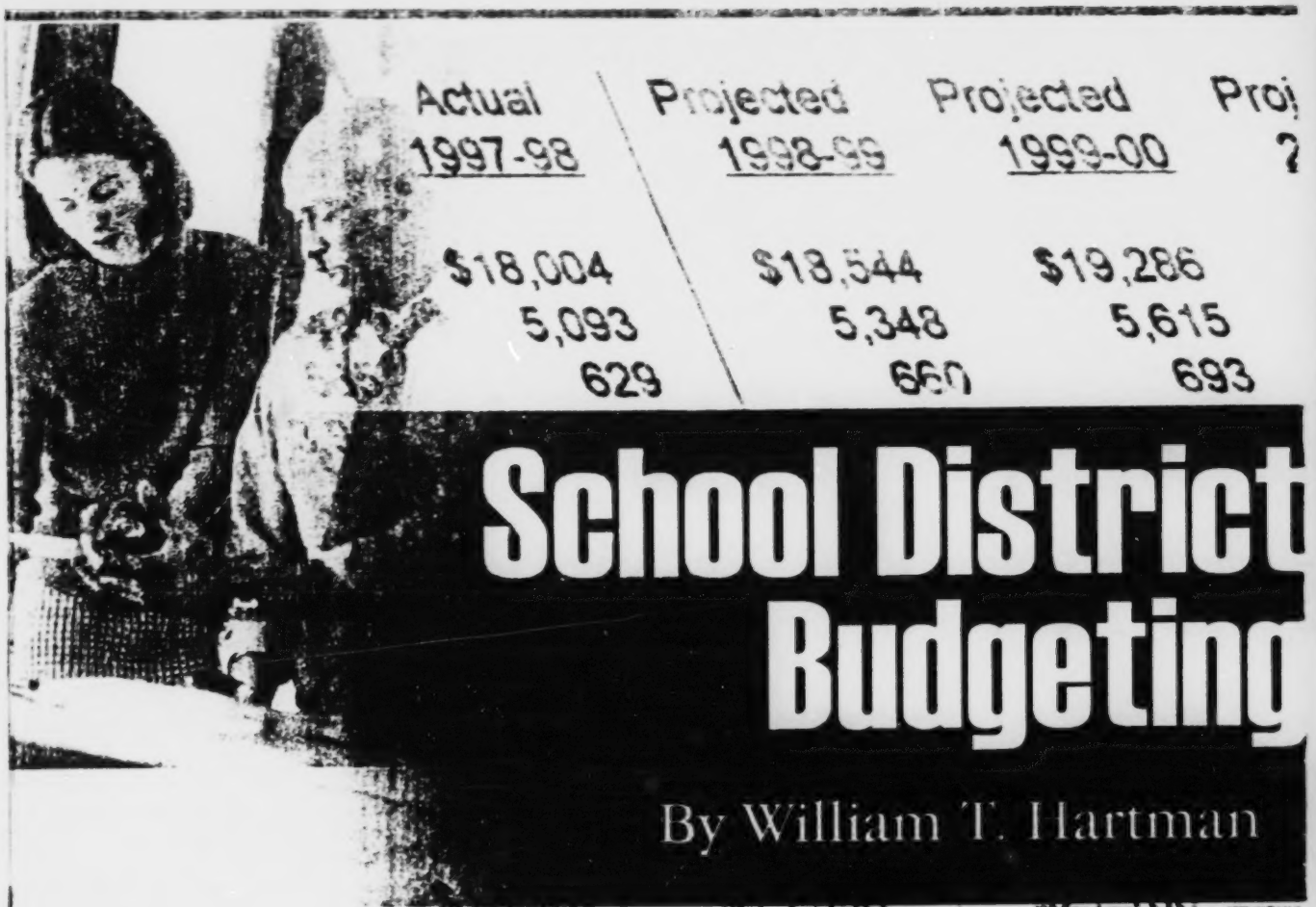

	Actual 1997-98	Projected 1998-99	Projected 1999-00	Proj ?
	$18,004	$18,544	$19,286	
	5,093	5,348	5,615	
	629	660	693	

School District Budgeting

By William T. Hartman

Revenue	2,005	2,1	
	10,190	10	
	1,218		
	$31,565		
S FUND BALANCE	$1,536		
SSED VALUATION	$327,400		
LAGE		55.4	
nual Changes	Mills		

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Foreword

School districts allocate scarce resources to programs and services through the budget process. As a result, this is one of the most important activities under taken by school districts to accomplish educational goals intended to improve learning and teaching in the classroom. As a focal point for key resource allocation decisions, budgeting is a powerful tool.

Despite its critical importance, budgeting remains one of the areas in school finance most in need of both conceptual and technical development. *School District Budgeting* makes important contributions to this area of educational finance, both in theory and practice.

Budgeting is both a planning and a political process. At the conceptual level, school budgeting is the process to determine if scarce resources will be allocated to activity A (i.e. reduced class size), activity B (i.e. increased technology funding), or to simply permit taxpayers to retain their money. At the practical level, it is a search for the delicate balance between the willingness and the ability of taxpayers to fund school programs and services and the needs for the education of the next generation.

The budget process and document serve many fundamental purposes. The most important of these is to provide the structure and information to make informed resources allocation decisions and to communicate these choices effectively to stakeholders. To these ends, the budget serves as a policy document, an operations guide, a financial plan, and a communications device.

School District Budgeting provides a comprehensive treatment of the resource allocation process from the development of planning guidelines to the reporting of the results of financial operations. The book also provides both a theoretical and practical treatment of the budget process. It is unique in this regard and fills an important need for both academics and practitioners.

This book can be used to teach graduate students about the budget development and management process in such courses as business administration, fiscal management, and school finance. The chapters in the text are organized around the critical steps in the budget process and cover the various components of the budget document. Finance and budget concepts are introduced and explained to the student with excellent illustrations and examples.

School District Budgeting also serves as a particularly useful tool for practitioners. The book is an excellent resource for technical issues in the budget process,

such as the formulation of budget estimates and the projection of student enrollments. It is also an excellent resource to assist school administrators in the development of the budget document. Most notably, Hartman links microcomputer models to the Meritorious Budget Award (MBA) requirements, which can assist in the preparation of a document that meets these national standards for budget presentation.

Denny G. Bolton
Past President, ASBO International
Pottstown, Pennsylvania

Preface

This is a book about school district budgeting. Unlike generic budgeting texts, it is devoted exclusively to the budgeting process in school districts. As such, it allows an in-depth treatment of both conceptual and practical aspects of budgeting in a single volume. The book was written out of necessity: The fragmentation of appropriate materials to teach about school budgets and budgeting makes it difficult to put together a comprehensive picture of the subject. By default, the state education accounting manual became the primary text, supplemented by state department of education memoranda and data, by school district budget documents and related materials, by individual chapters from books on school business management, and by journal articles. This book was developed to remedy this situation.

The school budget has always been of crucial importance to school administrators, but has received relatively little attention to date. Increasing costs, changing enrollments, lack of public support, the need to incorporate new technology into educational programs, and demands for accountability all combine to place educational budgets and administrators under a great deal of pressure. Public scrutiny of district budgets requires more convincing justification of expenditure requests. Traditional revenue sources are less stable. Administrators are being asked to accomplish more with fewer resources. In short, a thorough knowledge of the budget process and the ability to use it effectively are essential competencies for school administrators.

Understanding the philosophy behind budgeting is as important as knowing the proper techniques. Budgets are not an end in themselves, but rather a means to implement appropriate educational programs for the district's students. Budgeting is one of the most important management tools possessed by school administrators—one that should be used to further the district's educational goals and accomplishments—not hinder them.

The budgeting process is arguably the single most important planning and political process in a school district. Developing the budget requires that administrators plan in detail what programs, services, and activities they will operate for the upcoming year and what their costs will be. Concurrently, the revenues to support these operations must be estimated and expenditure levels adjusted, sometimes dramatically, to meet available funding. Once prepared, the key aspects of the budget must be communicated to a variety of publics to obtain support and ap-

proval. Finally, the approved budget is used to manage the district's fiscal operations. A smooth functioning budget process requires a great deal of effort and skill from school administrators, but it also results in an efficient, well-run school district. Conversely, a poorly managed budget process is a constant drain on administrators' time and energy and diverts their efforts from instructional activities.

This text was developed for two purposes: to be used as as a textbook and as a reference book. As a textbook, it is intended for use in graduate courses in educational administration for aspiring administrators—particularly those courses in business administration, fiscal management, and school finance. Further, it can be utilized as a text in professional development and inservice training programs for practicing administrators. As a reference book, it can serve as a source of new ideas, good practices, and useful examples for school administrators.

The book contains eight chapters, each devoted to a separate aspect of school budgeting. **Chapter 1** provides the introduction to budgets and budgeting along with working definitions. Both the steps in the budgeting process and the specific contents in the budget document are presented. This chapter represents a significant advance by incorporating new standards for budgets derived from the Association of School Business Officials, International's Meritorious Budget Award criteria. The functionality and quality of school district budgets can be substantially improved through adherence to these standards from the profession.

Chapter 2 continues the introductory material with a discussion of the different budgeting approaches that have been used in education, ranging from the early line-item approach to the most common current function/object approach. Alternative approaches—Program, Planning, and Budgeting Systems and Zero-Based Budgeting—are also reviewed. The budget calendar, which provides a timeline for all related budgeting activities, is then discussed. The final topic this chapter deals with is optional organizational arrangements for school district budgeting and includes an extended discussion of school site budgeting.

School accounting is the topic of **Chapter 3**. The focus is on fund accounting, expenditure and revenue accounts, and financial statements since these are the aspects of the school accounting system most relevant for administrators dealing with budgets. While individual state accounting systems will vary in details, most are based on the model accounting structure developed by the National Center for Education Statistics, which is used in this book, and have sufficient commonality to be discussed generally.

Chapter 4 is the heart of the book. Through descriptions and examples the procedures for developing budget estimates are illustrated. This is the practical, nuts and bolts, aspect of creating the numbers that go into the budget, which is rarely discussed. It begins with student enrollment projections, and how to translate them into personnel requirements. It also reviews estimation procedures for each type of budget expenditure—salaries, benefits, outside purchased services, supplies, and prop-

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erty. Revenue estimating procedures for each revenue source are presented as well. The chapter concludes with the need to balance expenditure and revenue estimates. With this information administrators can develop their district or school budget.

The subject of **Chapter 5** is budget adjustments; these are changes to the original budget at some point during the budgeting process. While budget reductions are the most common adjustments, increases to the budget and transfers from one budget section to another are also covered. The various types of budget reductions are discussed, ranging from improved operating efficiencies to program reductions. Additionally, a specific process for budget reduction, the Concentric Circles approach, which emphasizes the relationship of the expenditures to classroom instruction, is presented.

Chapter 6 concerns marketing the budget. There is new recognition that school administrators must be more effective in communicating key budget information with their various stakeholders to convince them to support the district's educational programs and the budget through local taxes. To aid in this task, the chapter covers budget presentations and presentation techniques, working with the media, and community relations. The remainder of the chapter concerns budget elections and is relevant primarily to those states that allow or require voter approval for district budgets. In this stage the budget process becomes overtly political. The discussion includes both the budget election process and a description of the elements and activities for a successful campaign strategy.

The last stage in the budget process, managing the budget, is discussed in **Chapter 7**. After the work of developing and approving the budget, the emphasis shifts to using the budget as a fiscal management device during the operating year. Using the budget to monitor expenditures, encumbrances to account for obligations not yet paid, transfers among budget accounts, and management information reports are all covered.

The final chapter, **Chapter 8**, focuses on the use of microcomputer models in budgeting. After a discussion of the appropriate and effective use of modeling, the chapter provides a variety of examples of microcomputer models along with and suggestions on how to utilize these tools throughout the budget process. A number of the models illustrated are linked with the Meritorious Budget Award requirements and can assist the district in developing and presenting the necessary information to meet the MBA standards.

The type of material covered in this book cannot be adequately learned by reading about the various budgeting procedures alone. To develop mastery of the techniques, it is essential that students actually apply them. To this end, each chapter has a set of realistic problems that require students to use the concepts and techniques presented in the text.

The author wishes to thank a number of people for their assistance in creating this book. The students in the Educational Administration Program at

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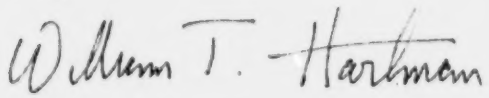
The Pennsylvania State University, where much of the material was developed and refined, were both encouraging in their responses to the content and format and helpful with their suggestions for improvement. I received many insights into the budget process and solid examples of applications from local school administrators, particularly Dennis Younkin and Seldon Whitaker of State College Area School District and Jim Gibson and John Gibble of Bellefonte Area School District. A special note of thanks is due to Denny Bolton of Owen J. Roberts School District, who during his term as President of the Association of School Business Officials, International encouraged this new edition and made its publication a priority of his administration. He served a regular source of technical information about the budgeting process and of inspiration for completion of the project. Don Tharpe of ASBO was very supportive and helpful throughout the endeavor and made sure that it finally happened. Most importantly, I want to thank Peggy Hartman, my wife, for her constant support and encouragement and for her insightful comments which improved the clarity and organization of many chapters.



William T. Hartman
State College, Pennsylvania

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1 Budgets and Budgeting

Concepts of Budgets and Budgeting

What's a budget? The premise of this book is that it is not just a document full of numbers prepared by a handful of isolated administrators and used to limit expenditures and taxes in the school district. Rather, it is a working tool central to the successful operation of the educational enterprise. Budgeting represents not only a requirement for school districts to justify the collection and expenditure of public funds, but also a significant opportunity to plan their mission, improve their operations, and achieve their educational objectives.

> *Budgeting is the accepted method for governments to allocate scarce resources to demanded services. As a result, it is a powerful tool and one of the most important governmental processes. The budget process focuses attention on decisions the government makes concerning overall direction, priorities, and use of resources. As the focal point for key resource decisions, the budget process can help governments make better financial and program decisions, improve operations, and enhance relations with citizens and other stakeholders.*[1]

Educational programs cost money. Even the most well conceived program cannot function without funding. Since money allows educators to provide instructional programs and services, administrators should view the budget as a device for accomplishing the districts' educational goals and objectives. Put another way, administrators must know how to use budgets and the budgeting process to establish and carry out district and individual school educational priorities.

The budget's primary purpose is to translate the district's educational priorities into program and financial terms —within available fiscal resources and legal constraints. Although the final decisions on the district's overall educational program will be made by the school board, school administrators can and do exert significant influence on these decisions. Because administrators prepare the budgets for review and approval, however, they generally determine most of the items and amounts included.

This book is designed for administrators and emphasizes the managerial uses of school district budgeting. Its chapters will discuss how to organize, prepare,

1. National Advisory Council on State and Local Budgeting, *A Framework for Improved State and Local Government Budgeting and Recommended Budgeting Practices, Draft October 22, 1995* (Chicago, IL: Government Finance Officers Association, 1995), p. 2.

modify, present, obtain approval for, and manage a school district budget. Underlying the specific procedures and techniques is the fundamental concept of this book: *The budget is much more than a collection of numbers; it is an important tool for school administrators to understand and use in achieving their basic mission—educating children in the most effective and cost-efficient manner.* Consequently, administrators can and should view the budget as a powerful and, when used properly, reliable device to obtain sufficient resources for district educational programs.

From a managerial perspective, the budget can provide a systematic means for focusing the efforts of district personnel on district priorities.

> *". . . for most states and localities, budgeting is something more than a device to authorize and control revenue-raising and spending. It is the primary vehicle for setting fiscal and program policy. In a growing number of jurisdictions, it has also become a principal means for establishing objectives and evaluating the performance of departments and programs."*[2]

The budget and the budgeting process can also be viewed as the major political process in a school district. The important decisions of who actually gets what are determined through this process. By requiring any and all expenditures to be included, the budget goes beyond district goal statements, which express intent but not necessarily allocation of resources, and forces choices among competing programs for the available scarce resources. Key segments of this process include establishing the district's objectives and priorities; allocating resources; involving the public through budget hearings, school board decisions, and other means of representative democracy; and in some states, conducting budget elections. Results of the budgeting process reveal not only the goods and services to be purchased, but, more importantly, which priorities prevail and whose purposes receive the greatest resource allocations.[3]

Definitions of Budgets and Budgeting

To begin this study, it is necessary to define what is meant by a budget. Most everyone has some idea of what a budget is, and most school administrators have seen and worked with budgets. However, *budget* and *budgeting* can have different meanings to different people. The following definitions provide common meanings and help avoid misinterpretation.

Budgets. Three separate elements make up a budget: 1) a description of the total educational program to be provided by the school district; 2) an estimate

2. National Task Force on State and Local Budgeting, *A Blueprint for State and Local Governmental Budgeting* (Chicago, IL: Government Finance Officers Association, 1994), p. 3.

3. A similar perspective is found in Charles H. Sederberg, "Budgeting," in L. Dean Webb and Van D. Mueller, eds., *Managing Limited Resources: New Demands on Public School Management* (Cambridge, MA: Ballinger, 1984).

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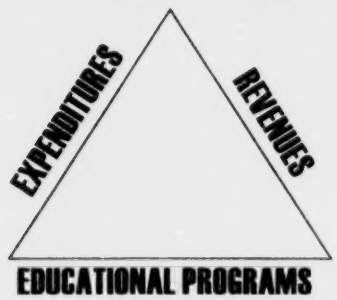
of the expenditures needed to carry out the desired program; and 3) an estimate of the revenues that will be available to pay for the expenditures. Therefore, a school district budget is defined as:

> *A document that specifies the planned expenditures and anticipated revenues of a school district in a given fiscal year, along with other past and projected data and information relating fiscal elements to the educational mission, organization, policies, programs, and outcomes of the district.*

A budget can be pictured as a triangle with each of the three elements as a side. Figure 1.1 illustrates that each element is connected to the other two and that the budget is incomplete without all three elements.

FIGURE 1.1

The Budget Triangle



Source: Walter G. Hack, I. Candoli, and John R. Ray, School Business Administration: A Planning Approach, 6th ed. (Boston, MA: Allyn and Bacon, 1998), p. 147.

The element selected as the foundation for the budget is a matter of perspective. Figure 1.1 depicts educational programs as the base of the triangle. This perspective implies that educational programs are the determining factor in the budget. Once the desired programs are established, the necessary expenditures are determined, and the required revenues are obtained.

Another equally valid perspective places revenues as the base of the triangle. This would imply that revenues are the driving force in the budget; that is, the revenues available to a school district determine how much can be spent and what educational programs can be offered.

Expenditures could also form the base of the triangle. In some states, districts have expenditure limits that set maximum amounts. This limit effectively establishes the amount of revenues districts need to raise, and the educational programs they can provide.

In practice, there is a great deal of interplay among the three elements; no single one is dominant. In establishing a budget, school districts must reach a balance between desired programs and fiscal possibilities.

Budgeting. Budgeting in a school district encompasses more than developing a budget document to specify expenditures and revenues. It includes the entire cycle of developing, approving, and implementing the district's budget. Budgeting, or the budgeting process, is defined as:

> *The sequence of activities involved in planning the district's educational programs, estimating the needed expenditures and revenues to implement these programs, gaining the necessary approval, and using the budget to assist in managing the district's operations.*

Creating the budget document itself is a detailed and complex undertaking. It requires substantial time and effort on the part of school district personnel. Budgets should be developed and approved before the beginning of the budget year so the document can be completed in time to direct the year's operations. This means that work on the next year's budget must begin during the current year. The budgeting process should begin early in the preceding year with central office planning and organization. During the course of the year, it includes developing expenditure and revenue estimates and obtaining necessary public approval. Once completed, the budget is the major financial management tool used to monitor, control, and evaluate fiscal activities in the school district.

To facilitate the budgeting process, the National Advisory Council on State and Local Budgeting (NACSLB) has developed five guiding principles. These principles reflect the major functions that need to be accomplished during the budget process. Within each guideline are multiple activities that "translate the guiding principles into action components."[4] The guidelines and associated elements, shown in Table 1.1, illustrate the magnitude and complexity of the budget process, as well as the interconnectedness of the fiscal and educational components with the community's needs and interests.

Business managers in school districts are fond of saying that budgeting is a year-round operation for many people in the district, not just a once-a-year activity by a small group of administrators to pull some numbers together. It's true. A school district with a year-round budget process will have personnel trained and knowledgeable; the necessary data available; the policies, procedures, and forms in place to guide the activities; and will have achieved the understanding and support of the school board for the needed budgeting actions. Last minute efforts at communication, data gathering, and process instructions tend to be haphazard,

4. National Advisory Council on State and Local Budgeting, *A Framework for Improved State and Local Government Budgeting*, p. 6.

TABLE 1.1

Guiding Principles of the Budget Process

Use a Vision and a Knowledge of Service Needs

1. Ensure that there is a vision of what the community and government should be.
2. Ensure that service and capital needs have been identified.

Develop Policies, Goals, Priorities, Programs, and Resource Utilization Plans

3. Develop fiscal and economic policy and goals in conformance with vision and needs.
4. Develop service and capital policy and goals in conformance with vision and needs.
5. Develop high-level administrative strategies for managing operations.
6. Develop financial, economic, organizational, service and capital programs and strategies to meet goals.

Prepare and Adopt a Budget That Integrates Vision, Policies, Goals, Strategies, and Available Resources

7a. Develop and implement a process that prepares an operating, spending, and resource plan based on the government's vision policies, goals, and available resources.
7b. Determine resource level options that may be utilized.
7c. Develop expenditure plans and options.
7d. Achieve necessary support for the budget.

Monitor and Control Utilization and How Well Goals Are Being Met

8a. Monitor fiscal and resource utilization (expenditure) results.
8b. Monitor program results.
9. Monitor customer and stakeholder satisfaction.
10. Monitor economic status and other external factors.
11. Assess and control results of programs and resource utilization (expenditures) during budget period.
12. Make adjustments and changes to goals, strategies and programs, based on the results of monitoring.

Involve Citizens and Stakeholders

13. Determine customer and stakeholder issues and concerns.
14. Achieve buy-in to the overall budgeting process.
15. Achieve buy-in to the overall vision, services and resource utilization.
16 Report on services and resource utilization.
17. Enhance citizen and stakeholder view of government.

Source: National Advisory Council on State and Local Budgeting, *A Framework for Improved State and Local Government Budgeting and Recommended Budgeting Practices, Draft October 22, 1995* (Chicago, IL: Government Finance Officers Association, 1995), p. 2.

rushed, and incomplete. The result can be mistakes in the budget and difficulties during the operating year. A well-planned budgeting process is no guarantee against omissions and errors, but it reduces the likelihood of their occurrence compared to an unstructured process.

Allocation of Resources

Allocation of resources among different programs in the district is a critical budget function. If funding were unlimited, there would be no need to choose among district programs, and each program would receive all the requested resources. However, funds are limited and choices have to be made on how the monies will be spent. By establishing budget amounts for different areas of the district's operation, there is an explicit allocation process that favors some areas over others. If the budget process is working properly, allocation decisions should represent the educational priorities of the district—within the confines of state and federal regulations, which may require certain programs or services to be provided.

The budget serves to implement the district's educational goals through selecting and allocating *resources.* Resources are the building blocks of budgets. They consist of all of district personnel, supplies and materials, goods and services purchased from outside vendors, and capital items the district uses to operate its educational program. Since resources represent costs and the overall budget sets a limit on the total dollar amount available, the district must choose which resources it will purchase for the coming year. These choices include not only the *types,* but the *mix* of resources to be used and the *quantity* of each. In reaching these decisions, both the need for the resource in a particular educational program and the *price* of the resource must be taken into account.

In economic terms, the budget can be viewed as the sum of all of the resources purchased by the district multiplied by their prices.[5] This relationship is shown in the equation below.

$$B = X_1 * P_1 + X_2 * P_2 + \ldots + X_n * P_n$$

where,

B is the total budget amount;
X_1 is the quantity of resource 1;
P_1 is the price of resource 1;
X_2 is the quantity of resource 2;
P_2 is the price of resource 2; and so forth.

5. Henry M. Levin, "The Effects of Different Levels of Expenditure on Educational Output" in R. L. Johns et al., eds., *Economic Factors Affecting the Financing of Education,* vol. 11 (Gainesville, Florida: National Education Finance Project, University of Florida, 1971), p.177.

This equation illustrates a simple, but important concept in budgeting: *Within a given budget limit,* a decision to use more of one resource will require a reduction in another area. Similarly, a price increase for one resource will require a reduction in the quantity of the resource purchased or a reduction in another area to stay within a given total budget amount. If increases (or decreases) in the total budget amount are possible (or required), the relationships among quantities and prices of the different resources hold.

For illustration purposes, assume that a district's educational program utilizes only two resources—teachers and microcomputers. If the budget called for hiring 100 teachers at an average salary of $35,000 each and purchasing one hundred microcomputers at an average price of $2,000 each, the total budget would be $3,700,000, as shown in the equation below.

a) B = 100 teachers * $35,000 + 100 microcomputers * $2,000
= $3,500,000 + $200,000
= $3,700,000

Assuming that the total budget amount was fixed, if average teacher salaries increased by $1,000 the district would either have to b) reduce the number of teachers; c) reduce the number of microcomputers; or d) reduce both the number of teachers and microcomputers. The changed resources and prices are shown in boldface.

b) B = **95 teachers** * **$36,000** + 100 microcomputers * $2,000
= $3,500,000 + $200,000
= $3,700,000

or

c) B = 100 teachers * **$36,000** + **50 microcomputers** * $2,000
= $3,600,000 + $100,000
= $3,700,000

or

d) B = **98 teachers** * **$36,000** + **75 microcomputers** * $2,000
= $3,550,000 + $150,000
= $3,700,000

To maintain both the number of teachers and microcomputers after a price increase for teachers (or microcomputers), would necessitate an increase in the total budget amount as shown below.

e) B = 100 teachers * **$36,000** + 100 microcomputers * $2,000
= $3,600,000 + $200,000
= **$3,800,000**

In some instances, the use of microcomputer assisted instruction in classrooms could reduce the number of teachers required. If this were an adjustment the district could make, the result would be an increase in a lower priced resource (microcomputers) and a decrease in a higher priced one (teachers) with a possible net reduction in cost to the district. For example, for the same total budget a doubling of the number of microcomputers would reduce the number of teachers by six.

f) B = **94** teachers * $35,000 + **200** microcomputers * $2,000
= $3,300,000 + $400,000
= **$3,700,000**

The purpose of this example is to emphasize that *the instructional strategy chosen by the district is directly reflected in resource requirements and costs, and that these are decisions that the district makes.* Even the choice of continuing past policies, such as limited use of microcomputers for instruction, and maintaining existing student/teacher ratios and support personnel standards, is a decision to utilize a particular mix of selected resources instead of an alternative one.

Through resource selection and allocation, the budget plays a crucial role in achieving a balance between what is ideal and what is possible. Most administrators, teachers, and other educators want the best possible programs and learning environments for their students. They can envision numerous valid improvements to their existing programs, and understandably desire to implement them. However, the funds to support the district's overall educational program are limited. Thus, the budget is a vehicle for forcing choices—deciding to select one area over another—like buying four microcomputers for the math department instead of replacing a welding machine in the industrial arts shop. It requires educators, the school board, and the public to function with limited funding and to select resources within the available funds that they believe will provide the best possible educational program for students.

Purposes and Uses of Budgets

The budget is one of the primary management tools for educational administrators. It is the major instrument of fiscal policy. As such, it has numerous uses and assumes many different roles during the year.

Planning. At the beginning of the development process, the budget operates as the principal *planning system* for the district, serving an educational function even more than a fiscal one. During this stage of the budgeting process, the district plans programs and services offered to students, educational program standards, support and central office activities, resources to be utilized, prices paid for the resources, and the total cost of the educational program—all within the constraints of available funding. If the district has a strategic plan in place, the budget should link the proposed programs and funding to the district's specified objectives.

Public involvement. The budget also serves as a vehicle for *public review and approval* of the district's educational and fiscal plans. This allows the public to examine the rationale for the proposed spending plans and to approve them at an acceptable level. The review and approval process can take many forms depending on state laws. These range from school board approval to submitting the local property tax levy required to support the budget to the voters, or even a vote on the budget itself. In states requiring voter approval, a defeat at the polls means that the budget must be resubmitted, often after being reduced, until approval is obtained.

Legal. Once approved by the school board, the budget functions as a legal document. In this capacity, it serves as the *legal basis for spending public funds.* With an approved budget the district has the authorization to expend the revenues derived from local, state, and federal tax dollars in the planned manner.

Control. During the operating year, the budget functions as a management control document. It provides a basis for *control over school district expenditures.* The authorized amounts for particular expenditures in individual programs and budget areas determine spending limits not to be exceeded without approval. By comparing the year-to-date expenditures in a budget category with the budgeted amount at regular intervals throughout the school year, administrators can watch for and prevent overexpenditures. Similarly, regularly comparing anticipated revenues with those actually received during the year allows administrators to *monitor income.* Early identification of an apparent shortfall in the district's anticipated revenues, allows more time and flexibility to deal with it.

Evaluation. Another use of the budget is to *evaluate fiscal performance.* This evaluation can focus on different areas for different types of administrators. For example, the superintendent's fiscal management performance can be judged by the functioning of the budgeting process itself, the accuracy of the budget, the quality and adequacy of the programs funded, and the control of expenditures throughout the year. A principal could be evaluated on a similar set of criteria, but focused at the individual school level.

On another level, the budget can be used to *promote accountability* in the school district. Increasingly, the public is calling for evidence that district goals are achieved—particularly in academic areas. The budget is a vehicle for linking resource allocation to student outcomes via performance indicators included in the comprehensive budget document.

Steps in the Budgeting Process

To accomplish the necessary goals of the budgeting process, five major steps need to be carried out. They are 1) development of guidelines; 2) preparation of the budget document; 3) modification of the original budget; 4) approval of the budget; and 5) management of the budget. Other models may combine or expand these steps, but the principal activities to be completed remain constant.

Development of Guidelines

Budgets do not come into being automatically. They have to be created by persons in school districts. Depending on the size of the district, the development process can involve several people to hundreds. To combine all these efforts into a unified district plan, everyone working on the budget must follow the same directions. Consequently, the first step in the process is to develop budget preparation guidelines.

The guidelines are developed within the framework of the political, social, and economic climate of the district and should reflect any programmatic or fiscal policy emphases or directives from the school board, along with relevant community input. The central office of the school district has this responsibility. The task of preparing the specific guidelines is usually given to the business office. This involves producing materials to guide others in the school district in developing their budget sections. The guidelines frequently contain items such as:

A message from the superintendent, which provides the fiscal context within which the budget is to be developed. This could include:

- Directives or expectations from the school board concerning the size of the budget or its growth or reduction (for example, a millage increase not to exceed 3 mills).
- Community economic and demographic considerations.
- Any limitations in expenditure requests in the new budget (for example, maintain the current level of services, hold increases to 3 percent for inflation, disallow new program requests, or restrict hiring of new personnel).
- Programmatic priorities to be incorporated into the budget, including strategic plan initiatives, board-directed activities, and areas of continuing emphasis.
- District policies for staffing levels for instructional, support, and administrative personnel.
- A schedule of events and dates in the budget process with emphasis on the timing for the budget proposals from individual district units.
- Guidelines on staff and community participation in preparing the budget proposals, particularly at the school level.
- Budget forms to be completed and accompanying instructions and worksheets.
- Accounting structure to be used, including district chart of accounts, budget codes, and cost center descriptions.
- Cost estimating procedures with special instructions on particular account items (such as allocation amounts for supplies and equipment, calculation of salaries and fixed charges, and allowable purchased services).
- Logistical procedures (such as number of copies to be submitted, to whom, and when, and who to contact for further assistance).

Once prepared, the guidelines are distributed to the district's schools and central office departments for use in preparing their budget proposals. Distribution is usually carried out relatively early in the school year to allow principals and district department administrators time to collect the necessary information, organize their staff, and inform them of the procedures and timelines established for budget preparation. Frequently, the business office will hold informational meetings to discuss the forms and procedures, and will conduct training workshops for administrators and clerical staff to explain the content and format of properly prepared budgets. If the individual school and department budget submissions can be made uniform and accurate, the district can avoid substantial later work later by the business office and the individual units to correct and standardize the budget proposals.

Budget Preparation

Estimation of expenditures. The heart of budget preparation is estimating expenditures for the upcoming year. Estimation is not an exact science, but every effort should be made to make it accurate. However, keep in mind that school district personnel will be required to predict their expenditures more than a year in advance. What is needed is not 100 percent accuracy, but the best estimate possible with the data available.

Development of expenditure estimates is frequently a bottom-up process in which specific proposals for the next year are prepared by individual schools and district-level departments in accordance with the guidelines of the district office. Under the direction of the unit's budget head (school principal or central office administrator), the schools and departments plan their activities and estimate costs within the programmatic priorities and funding level constraints established by the school board and district office. The budget requests, completed in the designated format and on the standardized forms, specify the particular expenditure items and their planned costs for next year. If budget reductions are a possibility, it may be useful to have priorities assigned to expenditure items as part of the development process, so that if all expenditure requests cannot be approved, the order of deletion is already established. Once completed, the individual requests from schools and district-level departments are submitted to the business office. There they are reviewed for compliance with the development guidelines and for accuracy, and then compiled into a single expenditure proposal for the school district. This estimation process will be explored in detail in Chapter 4.

Estimation of revenues. The other side of the budget development process is estimating anticipated revenues for the coming year. In contrast to the frequently decentralized process of specifying expenditures, estimating anticipated revenues is usually done in the central district office by business office personnel. These projections are based on information from representatives of outside funding sources, historical trends, calculations or estimates of funds available from local property taxes, and the business office's own assumptions about the future. This

process tries to project how much money the school district will obtain more than a year in advance and is subject to its own set of difficulties and uncertainties.

Revenues come from a variety of sources—local, intermediate, state, and federal. The most important local source is property taxes, but there are a number of other possible local sources as well. Intermediate governmental agencies, such as county education offices or regional educational service units, may also provide some funding for school districts, but the largest outside funding source for school districts is the state. Many state funding schemes provide aid to districts on an "equalized basis." That means more state funds are given to poorer districts and fewer funds are given to richer ones. The proportion of local and state revenues for a given district will depend on the general funding pattern in the state and the wealth of the district. Funds from the federal government for education are largely restricted to the support of particular purposes and programs. In total, the federal funds generally represent less than 10 percent of a district's total revenue, but in certain districts or in programs, such as vocational education or compensatory education, they may be much more important revenue sources.

Combining expenditure and revenue estimates. Once the separate expenditure and revenue estimates have been made, the numerical parts of the budget are complete. The business office must then combine the separate cost estimates into a unified expenditure projection and combine that with the revenue projections to form a single document. This is not the end of the budget development process. Rarely will the first combination of expenditure and revenue estimates be adequate. Adjustments, readjustments, and modifications are usually necessary before the budget is complete, but with the initial estimates of the desired expenditures and the anticipated revenues the process is well begun.

Budget Modification

The total revenue estimate for the school district is critical because it establishes the amount of money the district can spend. Expenditures cannot exceed revenues. In almost all states, school districts are prohibited from deficit spending. Consequently, when the separate expenditure estimates are combined and compared with the projected revenues, the budget must balance; that is, the projected expenditure total must be equal to or less than the projected revenues. If the projected expenditures are greater than revenues, the difference between the two figures must be eliminated.

There are two basic ways of bringing the budget into balance: *reducing expenditures* to meet available revenues and *increasing revenues* to support the desired level of expenditures. Practically, some combination of these two methods is usually employed by school districts. The most painful option is to reduce expenditures; however, this is the action over which districts have most control.

The conventional wisdom surrounding expenditure reduction is that cuts should be made as far from the classroom as possible. This is not always possible,

particularly if the required budget reduction is large. Personnel costs make up more than 80 percent of the total budget for most districts, and the bulk of the personnel costs are for teachers. Consequently, the only place to realize large budget reductions is from personnel, and that usually means teachers must be included. Chapter 5, Budget Adjustments, discusses the process, possible management actions, and the implications for budget reductions in greater detail.

The revenue source over which the district has most control is the local tax levy. Local revenues come primarily from property taxes, but in some states districts are permitted to levy local income, per capita, and other local taxes as well. Raising local taxes, however, is not necessarily a solution to a budget imbalance as there are often practical and political considerations that limit tax increases. Other local revenue sources usually offer limited opportunities for increased income. The other funding sources—state and federal—are not under the control of the school district. As a result, in these areas the best the school district can do is to lobby for additional support—usually a long-range strategy—and to obtain the latest available estimates of the state and federal monies to incorporate into the revised budget.

Budget Approval

Once the budget has been prepared and proposed expenditures are in balance with expected revenues, it must be approved by a higher authority than the district superintendent. This usually means the district school board, although for some districts, another public body such as a city council may have to give its approval as well. Additionally, in some states the state department of education is required to approve the district's budget prior to release of state funds. Whatever the specific state and district requirements, the approval process requires public hearings and the opportunity for public discussion of the proposed budget. In this process additional changes to the budget may be incorporated at the request of the appropriate governing body or bodies. These changes can be to modify expenditures to create, expand, or reduce programs; to revise revenue estimates based on new information or assumptions; or to adjust the amount of local taxes to a level that is acceptable to the public.

Once approved by the school board and other public bodies as necessary, many districts face another, increasingly difficult hurdle—approval by the voting public. In some northeastern states the district budget must be approved at a public town meeting. Districts that must obtain voter approval of their budget have the task of holding and winning a fiscal election. In the face of increasing voter resistance to higher taxes, as illustrated in recent, widespread property tax revolts in many states,[6] a successful fiscal election campaign generally requires a well

6 For brief reviews of the tax and revenue limitation movement, see C. Philip Kearney, "Reducing Local School Property Taxes: Recent Experiences in Michigan," *Journal of Education Finance* 21 (Summer 1995), 165-185; and Howard R. Fleeter, "An Analysis of the Impact of Property Tax Limitation in Ohio on Local Revenue for Public Schools," *Journal of Education Finance* 21 (Winter 1996), 343-365.

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planned and implemented campaign to turn out a majority of "Yes" voters. Due to the importance of budget approval (in whatever form is relevant for the district), the process of Marketing the Budget is subject of Chapter 6.

Budget Administration

Once the budget has been approved by the necessary authorities, it becomes the major fiscal management tool during the school year. Administrators manage their operations throughout the year using the budget in a variety of ways: monitoring program implementation, controlling expenditures, keeping track of revenues, making corrections in expenditure plans to reflect changes in program plans or actual revenues, and reporting on the fiscal operations to the school board and public. Chapter 7 examines these budget management practices in detail.

Current Problems with Budgets

Traditionally school district budgets have had a short-term focus, restricted to presenting proposed expenditures and revenues for the upcoming year and determining the necessary local property tax rate. While this limited orientation has its purpose, it severely constrains the scope and usefulness of the budget. To achieve maximum effectiveness the budget should provide substantially more information to serve as a framework for understanding and evaluating the proposed financial underpinning of the educational programs and services of the district.

The narrowness and short-term nature of many school district budgets has resulted in a number of problems that limit a budget's usefulness as a management tool for effective resource allocation. In contrast, the Government Finance Officers Association has identified a set of good budgeting practices associated with preparing and implementing public sector budgets.[7] These practices are often missing in school districts' budgeting process:

- Integrating long term-planning with the budget.
- Establishing measures and ongoing monitoring of performance.
- Obtaining citizen and other stakeholder involvement early in the budget process.
- Effectively communicating goals, assumptions, and tradeoffs to citizens and other stakeholders.
- Providing incentives and a sense of empowerment to managers and other government employees to implement effective practices and achieve goals.
- Incorporating realistic revenue and expenditure forecasts.

7. Government Finance Officers Association, *National Budget Symposium: New Directions in State and Local Budgeting, Report of Proceedings* (Chicago, IL: Government Finance Officers Association, 1993), p. 4.

Contents of Budgets

In order to overcome the common weaknesses of many school district budgets and to expand the effectiveness of both the budget document and the budgeting process, the Association of School Business Officials International (ASBO) has established a set of standards against which school district budgets can be measured. These standards, specified in the Meritorious Budget Awards (MBA) program,[8] provide the criteria to evaluate the comprehensiveness, effectiveness, and quality of school district budgets. They go well beyond the traditional financial indicators and incorporate planning, pupil, personnel, and performance information into the budget document. The expanded budget is one of the most important ways to communicate with school board members, school staff, parents, taxpayers, and other interested citizens. It allows outsiders, as well as insiders, to understand, not only the proposed expenditures, revenues, and tax rate (or levy), but the mission and organization of the school district, how the budget process operates, assumptions behind the financial projections, fiscal environment in which the district functions, impacts of local taxes on taxpayers, and anticipated outcomes to be achieved.

The model budget recommended in the MBA program contains four main components: Introductory section, Organizational section, Financial section, and Informational section.[9] Each section contains essential information concerning the operation and financing of the school district. While not all district budgets will reach the level of the comprehensiveness required in the MBA program, its sections contain all the fundamental components that should be included in all school district budgets, as well as the necessary additional elements to include to reach the advocated level of excellence.

Communicating the district's financial needs and resources in a clear manner should be the driving forces behind selecting information and designing the presentation format for the budget. The MBA program provides guidance to simplify and improve this task. Using a pyramid approach, important and summary information are highlighted and made available in an easy to understand format for lay readers, which often include many school board members. More specific expenditure and revenue projections and supporting data needed by those interested in examining a particular program or area in more detail are available in following fiscal pages or in other budget sections.

On a practical note, it is helpful in presenting and explaining the budget if information in the sections is easy to find. Color coding each section of the

8. Dennis Strachota, *Standards of Excellence in Budget Presentation* (Reston, VA: Association of School Business Officials, International, 1996).

9. This section is based upon the Meritorious Budget Award Criteria established by the Association of School Business Officials, International (1994) and Strachota, *Standards of Excellence in Budget Presentation*, which provides further explanations of the criteria and examples from award winning budgets.

budget document and/or using tabs to separate and identify sections enhances the ease of reference.

Introductory Section

The Introduction is the first section of the budget document and contains two primary elements: an Executive Summary and a listing of the district's board members and top administrators. The Executive Summary is a complete document in and of itself and is "liftable" to stand alone as an adequate summary explanation of the budget. Its subsections integrate and summarize the other three sections of the budget. Combining data, graphs, and narrative helps to present the information in an easy to understand style. The contents of the Introductory Section are shown in Table 1.2.

Organizational Section

The Organizational section of the budget describes the district's guiding educational philosophy, its management structure, the legal framework the district operates within, and the budget development/administration process. This section provides the context for the fiscal aspects that follow. Organizational section contents are shown in Table 1.3.

Mission statement. The mission statement speaks to the school district's overall purpose. It is a statement that sets forth succinctly the district's educational philosophy and beliefs about the role of education. It generally deals with student learning and may include relationships with families, community, and staff. It is a statement unique to an individual district and should reflect careful thought and discussion among all concerned parties: school board members, administrators, teachers and other professional staff, support staff, parents, and other community members. Figure 1.2 provides a sample mission statement from an MBA budget.

Major goals and objectives. Goals provide structure to the more abstract mission statement. They identify the district's priorities and give direction to its current operations and planning activities. They also provide guidance for budget preparation since proposed expenditures can be linked to achieving these goals. Figure 1.2 also presents the goals associated with the sample Mission Statement.

Objectives refer to short-term activities identified to be carried out typically in the upcoming year or two. They have a more specific focus and often designate achievements to be accomplished during the year for particular programs or service. Objectives vary with the needs of individual school districts. Examples from MBA winning budgets include implementing the district's technology plan; renovating and expanding the high school; constructing a new elementary school; installing a new computerized transportation routing system; improving communication within the district; adopting revised curriculum to meet current technology and academics; and developing site-based management plans for district.

TABLE 1.2

Criteria for Introductory Section of Budget

1. The document should include an *Executive Summary* which is liftable and which presents the budget in narrative, numeric, and graphic form. The *Executive Summary* should present, in an integrated and summary form, the following components of the budget.
   a. An *Organizational Summary Component* which includes a discussion of the major goals and objectives, a brief summary of the budget process, a description of significant changes in the budget process and/or budget policies, and an explanation of how human/financial resources are allocated to achieve significant goals and objectives.
   b. A *Financial Summary Component* which presents an overview of revenues and expenses/expenditures for all funds, budget comparisons of at least the current year to the budget year, a discussion of significant trends, events, and initiatives, and an explanation of significant financial and demographic changes. The use of charts and graphs is strongly encouraged.
   c. An *Informational Summary Component* that presents important data and information in which there is a high level of public interest.
2. The document should include a listing of members of the school board and first-level administrative personnel.

Source: Meritorious Budget Award Criteria, Association of School Business Officials International.

TABLE 1.3

Criteria for Organizational Section of Budget

1. The document should include a coherent statement of the mission of the school entity.
2. The document should set forth the major goals and objectives for the school entity. If the cost of a goal or objective is significant and measurable it is suggested, but not required that the cost be included.
3. The document should include an organizational chart that lists the administrative staff by position or title.
4. The document should include a discussion of significant budget and financial policies, procedures, rules, and regulations at the legal, board, and administrative levels. Such policy discussions may include, among others, legal, board, and administrative requirements on fund balance, encumbrances, reserves and debt management.
5. The document should describe the budget development process including the capital budget development process.
6. The document should describe the budget administration and management process.

Source: Meritorious Budget Award Criteria, Association of School Business Officials International.

FIGURE 1.2

Philosophy and Major Goals

GREAT VALLEY SCHOOL DISTRICT
BUDGET 1997-98
PHILOSOPHY AND MAJOR GOALS

PHILOSOPHY

We believe that education at Great Valley should provide opportunities for all children to develop as individuals intellectually, emotionally, socially, physically, and morally.

We believe that the school, home, and community, must develop and maintain programs that help children learn basic skills, extend positive experiences, and make responsible choices concerning their future roles as contributing members of a democratic society.

Finally, we believe that education should stimulate the desire for learning as a continuing, life long process.

MAJOR GOALS

To provide opportunities for all children:

1. To develop and apply thinking skills that reflect childrens' best intellectual potential;
2. To develop and demonstrate the skills of communication which represent positive individual and social behavior;
3. To recognize and understand cultural differences among peoples of the world and their contributions to American life;
4. To develop creative skills and appreciate the aesthetic achievements of others;
5. To develop and maintain habits and attitudes that contribute toward physical and mental health;
6. To gain the knowledge of and develop the practical skills appropriate to career and vocational goals;
7. To develop the talents, skills, and attitudes necessary for satisfying lifetime recreational activities;
8. To use the knowledge and skills of the educational program for personal achievement and responsible citizenship;
9. To gain the knowledge of and develop skills with modern technology and science;
10. To develop literacy in the arts through programs of performance, creation and analysis.

Source: Great Valley School District, Malvern, PA 1997-98 (Page 1)

Organizational chart. The personnel structure and reporting relationships within the district are shown on the organizational chart. This chart depicts the various schools operated by the district as well as central office units, which direct and support the educational operations. A typical organization chart provides position titles and shows hierarchical relationships between positions with connecting lines. Additional information often shown on these charts includes name of incumbent, telephone number, and number of staff in unit. If desired, an

organizational chart can be used to show the overall organization and its major units, with additional charts providing details for each unit.

Budget and financial policies. School district budgets are guided and bound by a variety of legal constraints related to financial matters. This section offers the opportunity to set forth those fiscal statutes and policies under which the district must operate. It is instructive for board members, administrators, school personnel, and the public to understand the rules the district must follow in the financial area. Areas to consider including are relevant state laws and board policies. Brief descriptions of the relevant aspects of these statutes and policies, written for the lay reader, should be included.

Examples of state statutes that could be included are requirements concerning the process for developing and adopting a budget, the budget process timing, public involvement, a balanced budget, accounting system, transfers among funds, restrictions on use of funds, bidding and purchasing, cash management and investments, payment of financial obligations, construction of facilities, and audits.

At the local level, the school board may have established policies that directly affect the budget including a balanced budget requirement; compliance with applicable local, state, and federal laws; proper accounting procedures; assignment of responsibility for budget development and management; capital improvement; debt limitations; revenue estimation; budgetary and fund balance reserves; and auditing and reporting. Including this material can provide a greater awareness and appreciation of the complexity and constraints facing school business officials in the fiscal area.

Budget development process. This section briefly explains the process the district uses to develop its budget. Both the operating and capital budget development processes should be included, whether they are unified or separate. The description clarifies how the district carries out each of the steps identified earlier—developing guidelines; preparing the budget document; modifying the original budget; getting budget approval; and managing the budget. It should also designate the responsibilities of the principal participants—school board members, superintendent, business manager, other administrators, staff, and community.

It is often useful to illustrate the budget development process with diagrams or charts to clarify the steps, timing, and participants. The most common approach is a budget calendar that depicts the necessary activities chronologically. Preparing a budget calendar is discussed in Chapter 2.

Budget administration and management process. Once the budget has been developed and approved, it is necessary to manage the district in accord with its provisions to assure expenditures do not exceed approved levels, to monitor revenues, and to adjust to new and changing conditions. This section describes the budgetary control procedures the district uses to administer the budget during the operating year. Topics of interest could include organizational responsibilities for budgetary management; the expenditure request, approval, and control process; encumbrances; budgetary transfers and reallocations during the year; and budget information and reporting.

TABLE 1.4

Criteria for Financial Section of Budget

1. The document should provide an explanation of the financial structure of the school entity by fund as well as the classification of revenues and expenditures.
2. The document should include a presentation of the budgets for all governmental and proprietary funds of the school entity at the legal level required by state/provincial laws and/or the level which the budget is adopted by the governing body of the school entity. The presentation should include revenues by source and expenditures by function and object. Budgets may also be presented by program, location, and/or administrative unit.
3. The presentation of the budgets should use a pyramid approach, which begins with a summary of all funds and then presents individual funds. These presentations may be followed by optional program, location, and/or administrative unit budgets.
4. The presentation of the budgets should include fund balances, revenues, expenditures, and other financing sources/uses, for the current year budget and/or the estimated current year actual and the proposed budget year. Presentation of prior year actual data should be presented in either the *Financial* or *Informational Section* at the same level of detail as presented for the proposed budget year.
5. The document should describe major revenue sources, explain the underlying assumptions for the revenue estimates, and discuss significant revenue trends. Some explanation of the state/local funding structure and regulations may be necessary to complete this explanation.
6. The document should include budgeted capital expenditures and list major capital projects for the budget year, whether authorized in the operating budget or in a separate capital budget.
7. The document should describe if and to what extent capital improvements or other major capital spending will affect the school entity's current and future operating budgets. The focus should be on reasonably quantifiable additional costs and savings (direct and indirect) or other service impacts that result from capital spending.
8. The document should include financial data on current debt obligation, describe the relationship between current debt levels and legal debt limits, and explain the effects of existing debt levels on current and future budgets.
9. The document should explain the basis of budgeting for all funds, whether GAAP, cash, modified accrual or some other basis.

Source: Meritorious Budget Award Criteria, Association of School Business Officials International.

FIGURE 1.3

Statement of Legal and Fiscal Independence

The District Entity

The legal name of the district is the School District of Kettle Moraine.The school district was established in 1967. The district is located in western Waukesha County and eastern Jefferson County half way betweenMilwaukee and Madison on Interstate Highway 94. The district includes all orpart of the City of Delafield, the Villages of Dousman, North Praide andWales and the Townships of Delafield, Eagle, Genesee, Ottawa, and Summit ofWaukesha County and a portion of the Township of Sullivan in JeffersonCounty.

The district is an independent entity governed by an elected sevenmember School Board. The Board has the power and duty to set budgets,certify tax levies, issue debt and perform other tasks necessary to theoperation of the district. The district is subject to oversight by theWisconsin Department of Education. This oversight generally includes anapproval process that is compliance oriented and is more ministerial innature than substantive.

The district serves a general population of approximately 21,500 in anarea of about 90 square miles. The district operates four elementary schools(grades PK-5), one middle school (grades 6-8), one high school (grades 9through 12) and a senior citizen center. The district office is housed in aseparate facility. In addition, the district rents a one room school house to aprivate firm for a day care center. The district currently has 4,194 studentsenrolled in its regular school year, day programs.

Source: Kettle Moraine School District, Wisconsin, 1996-97, (Page 17)

Financial Section

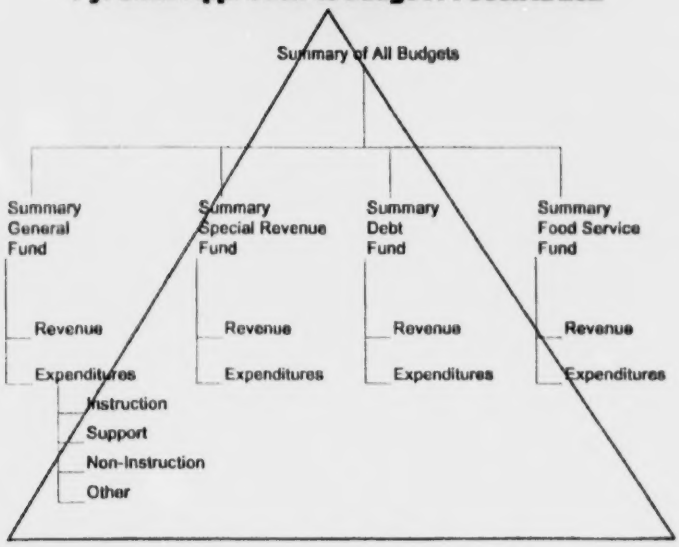
The financial section makes up the bulk of the budget document and contains most of the fiscal data. Beyond the projected revenues and expenditure estimates, it provides elements to help readers understand the structure and content of the fiscal data and accounting approach used by the district. This section also includes the capital budget and debt obligations. Table 1.4 shows financial section contents.

Financial structure. This component includes information on the district's legal and fiscal independence. An independent district has the authority to approve its own budget and to raise revenue through levying its own taxes. A dependent district reports to another government authority, such as a municipality. This higher authority approves the district's budget and appropriates the funds the district raised for its operation. A representative statement describing a district's status is shown in Figure 1.3.

Accounting classifications. The accounting structure used by the school district is discussed in this section. This description explains the upcoming budget presentations, which are shown according to the district's accounting system. Generally, educational entities use fund accounting in which separate funds are established for particular purposes. The different funds the district has established to account for its various activities are specified briefly here. Additionally, the classification system for revenue, expenditure, and fund balance accounts is described and illustrated. These are generally prescribed by the state's school accounting system. School fund accounting and classification systems are discussed in detail in Chapter 3.

FIGURE 1.4

Pyramid Approach to Budget Presentation



Budget estimates. At the core of the budget document are the district's budget presentations. These include the revenue and expenditure projections for all funds used by the district. For clarity and uniformity of presentation, the MBA criteria specify several features for budget presentation:

1. All governmental and proprietary funds of the district are reported in the budget document.
2. The information presented should be at the level required by state law and district policy.
3. Revenue projections are shown by source.
4. Expenditure estimates are shown by function and object; other presentation options may also be included.
5. A "pyramid" approach is recommended. Here the initial presentation is a summary of all funds and is followed by more detailed presentations of individual fund budgets. Within a given fund, additional presentations may be shown using other dimensions (e.g., by program, school building, and cost center). A diagram illustrating the pyramid approach is shown in Figure 1.4.
6. Data in the budgets should include revenues, expenditures, fund balances, and other financing sources/uses. Figure 1.5 presents the summary budgets for the four governmental funds used by a Pennsylvania school district. The summary shows revenues by major source, expenditures by major program, transfers from one fund to another, each fund's change in fund balances, and the total for all three funds.
7. Budget data should include budget or estimated actual data for the current year and the proposed amounts for the new budget year. The Informational section calls for prior year actual data at the same level of detail. Those data

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FIGURE 1.5

Summary of All Budgets - Governmental Fund Types

ALL GOVERNMENTAL FUNDS
SUMMARY OF BUDGET

	General Fund	Debt Service Fund	Special Revenue Funds	Capital Projects Fund	Total
Revenues					
Local Sources	$28,241,200	$ 0	$ 580,000	$ 702,500	$29,523,700
State Sources	7,553,600	0	0	0	7,553,600
Federal Sources	205,200	0	0	0	205,200
Total Revenues	36,000,000	0	580,000	702,500	37,282,500
Other Financing Sources					
Fund Transfers In	0	2,019,359	206,150	0	2,225,509
Total Revenues and Other Financing Sources	36,000,000	2,019,359	786,150	702,500	39,508,009
Expenditures					
Current Expenditures					
Instructional Services	20,616,232	0	40,000	0	20,656,232
Support Services	12,301,201	0	0	0	12,301,201
Opereration of Noninstructional Svcs	482,058	0	136,150	0	618,208
Capital Outlay	0	0	8,780,000	4,114,225	12,894,225
Debt Service	0	2,019,359	0	0	2,019,359
Total Expenditures	33,399,491	2,019,359	8,956,150	4,114,225	44,375,000
Other Financing Uses					
Fund Transfers Out	2,300,509	0	0	0	2,300,509
Budgetary Reserve	300,000	0	0	0	300,000
Total Other Financing Uses	2,600,509	0	0	0	2,600,509
Total Expenditures and Other Financing Uses	36,000,000	2,019,359	8,956,150	4,114,225	51,089,734
Excess (Deficiency) of Revenues and Other Sources Over Expenditures and Other Uses	0	0	(8,170,000)	(3,411,725)	(11,581,725)
Fund Balances - July 1, 1997	1,080,000	0	15,570,000	24,300,000	40,950,000
Fund Balances - June 30, 1998	$ 1,080,000	$ 0	$ 7,400,000	$20,888,275	$29,368,275

Source: Owen J. Roberts School District, Pottstown, PA (Page 70)

may be incorporated into this presentation or be shown in the later section.

Continuing the example with the same district's budget, Figure 1.6 shows the general fund revenue budget projections by major local, state, and federal source for the current year (budget and estimated) and the budget amounts for the next year. Figure 1.7 presents a portion of the general fund expenditure budget, which shows the instructional programs

FIGURE 1.6

Revenue Budget - By Source

GENERAL (OPERATING) FUND
REVENUE BUDGET

Function Subfunction	Budget 1997-98	Budget 1998-99
6000 LOCAL SOURCES		
6111 Current Real Estate	$ 21,938,000	$ 23,400,000
6112 Interim Taxes	275,000	350,000
6113 Public Utility Realty Tax	285,000	300,000
6114 Payments in Lieu of Current Tax	400	0
6151 Earned Income Tax	1,600,000	1,900,000
6153 Real Estate Transfer Tax	325,000	400,000
6157 Mercantile Tax	160,000	200,000
6411 Delinquent Real Estate	600,000	600,000
6451 Delinquent Earned Income	150,000	150,000
6510 Interest on Investments	550,000	651,500
6910 Rentals	2,000	2,000
6920 Donations & Contributions	10,000	10,000
6940 Tuition from Patrons	194,200	229,200
6980 Revenue from Community Services	37,500	43,500
6990 Miscellaneous Revenue	5,000	5,000
TOTAL REVENUE FROM LOCAL SOURCES	26,132,100	28,241,200
7000 STATE SOURCES		
7110 Basic Instructional Subsidy	4,016,600	4,056,000
7160 Tuition for CT Placed Children	6,000	6,000
7210 Homebound Education	100	100
7220 Vocational Education	7,000	6,000
7270 Special Education	1,064,000	1,258,000
7310 Transportation	900,000	900,000
7320 Rentals and Sinking Fund Payments	65,000	65,000
7330 Health Services	71,500	76,500
7350 Sewage Treatment Operation	6,900	6,900
7810 Revenue for Social Security Payments	600,000	629,100
7820 Revenue for Retirement Payments	425,600	550,000
TOTAL REVENUE FROM STATE SOURCES	7,162,700	7,553,600
8000 FEDERAL SOURCES		
8513 ECIA Title I	160,000	160,000
8560 ECIA Title VI	15,000	15,000
8570 EESA Title II	5,000	5,000
8670 Other Federal Programs	25,200	25,200
TOTAL REVENUE FROM FEDERAL SOURCES	205,200	205,200
TOTAL REVENUE	$ 33,500,000	$ 36,000,000

Source: Owen J. Roberts School District, Pottstown, PA (Page 72)

in a similar format.

Revenues. Revenue projections form one half of the budget equation; they represent estimates of the funds expected to be available during the budget year to pay for the estimated expenditures. As such, they are critical to the fiscal integrity of the budget and the district. To bolster the understanding and credibility of the revenue estimates, a brief description of the important revenue sources

FIGURE 1.7

Expenditure Budget - By Function/Object

GENERAL (OPERATING) FUND
EXPENDITURE BUDGET BY FUNCTION AND OBJECT

Function Object	Budget 1997-98	Budget 1998-99
1100 REGULAR PROGRAMS		
100 Personal Services – Salaries	$ 11,537,669	$ 12,400,763
200 Personal Services – Benefits	3,581,442	3,371,864
300 Professional Services	15,913	0
400 Purchased Property Services	28,076	32,175
500 Other Purchased Services	58,636	46,409
600 Supplies	275,159	305,519
700 Equipment	48,550	41,550
800 Other Objects	1,150	1,375
TOTAL REGULAR PROGRAMS	15,546,595	16,199,655
1200 SPECIAL PROGRAMS		
100 Personal Services – Salaries	1,087,086	1,362,812
200 Personal Services – Benefits	313,572	367,957
300 Professional Services	515,691	469,816
500 Other Purchased Services	118,100	150,800
600 Supplies	8,971	10,826
800 Other Objects	571	400
TOTAL SPECIAL PROGRAMS	2,043,991	2,362,611
1300 VOCATIONAL PROGRAMS		
100 Personal Services – Salaries	369,289	278,280
200 Personal Services – Benefits	84,313	67,334
400 Purchased Property Services	2,000	3,558
500 Other Purchased Services	885,112	955,050
600 Supplies	12,200	12,200
700 Equipment	5,650	5,650
TOTAL VOCATIONAL PROGRAMS	1,358,564	1,322,072
1400 OTHER INSTRUCTIONAL PROGRAMS		
100 Personal Services – Salaries	256,955	379,012
200 Personal Services – Benefits	58,593	68,279
300 Professional Services	0	25,000
500 Other Purchased Services	1,000	47,000
600 Supplies	44,067	12,603
TOTAL OTHER INSTRUCTIONAL PROGRAMS	360,615	531,894

Source: Owen J. Roberts School District, Pottstown, PA (Page 75)

FIGURE 1.8

Basis of Accounting

BASIS OF ACCOUNTING

The modified accrual basis of accounting is followed by the Governmental, Expendable Trust and Agency Funds, which is in conformity with the *Illinois Program Accounting Manual for Local Education Agencies* and generally accepted accounting principles. Under the modified accrual basis of accounting, revenue is recorded when susceptible to accrual-that is, when they became both "measurable" and "available" to finance expenditures of the fiscal period. Available means due and collectible within the current period or soon enough thereafter to be used to pay liabilities of the current period. Expenditures, other than interest on long-term debt, are generally recognized under the modified accrual basis of accounting when the related fund liability is incurred. The exception to this general rule is that principal and interest on general obligation long-term debt, if any, is recognized when due.

Source: Community Consolidated School District 15, Palatine, IL (Page 19)

should be included. These encompass local taxes and other local sources, state aid, federal grants, use of the district's fund balance, and other sources, such as proceeds from bond sales. The description of sources should be accompanied by the assumptions used to develop the projections. Graphs or tables used to illustrate historical trends can help demonstrate the reasonableness of the projections. Procedures for developing revenue projections are discussed in detail in Chapter 4.

Capital budget. Capital budgeting refers to the expenditures for land, buildings, and equipment. To be complete, the budget document should include the district's capital spending plans, as well as the operating budget. The appropriate information would contain the budgeted expenditures for capital purposes, specifications for the approved capital projects and, if available, projections of how the capital expenditures will affect current and future operating budgets—added outlays (e.g., for operation and maintenance of additional facilities) or cost savings through efficiencies.

Debt. Basic information on the district's indebtedness should also be contained in this section. It should include the amount and dates of outstanding debt obligations, their impact on the operating budget (i.e., annual debt service requirements), and legal debt limits of the district.

Basis of budgeting. The basis of budgeting refers to accounting approach used by the district to record financial transactions for budgeting purposes. In particular, it specifies the method used by the district to record and budget for revenues and expenditures when the actual cash receipt or disbursement differs from those recognized in the accounting system. This issue is discussed more thoroughly in Chapter 3. A sample statement from an MBA budget is given in Figure 1.8.

Informational Section

The final section of the budget document explains the school district's operation. In fact, much of the material called for in this section are necessary preliminary steps to establishing revenue and expenditure estimates in the budget. In many cases, these are the supporting data on which the budget year financial projections are based. Other information included assists in explaining the budget's impact and justifying public support for schools. The recommended contents of this section are shown in Table 1.5.

Five-year comparisons. To put the proposed budget year financial projections in context, additional historical data should be included. Specifically, the MBA criteria call for three prior years of actual revenue and expenditure data for all governmental funds. This is in addition to the current year and budget year information discussed in the financial section, thus bringing the total to five years of financial data. This information can be presented in this section or can be incorporated into the earlier schedules in the financial section.

Budget forecasts. Traditionally, budgets have focused on the upcoming budget year with some historical data for context and comparison. This new requirement calls for adding three years of budget forecasts to the document for governmental funds. This extends the financial projections into the future and provides an estimate of the magnitude of anticipated revenues and expenditures required to operate the district. As this is a forecast—not an actual commitment of funds—it can be presented at a summary level (e.g., major revenue sources, major objects of expenditure), as compared to the detailed information of the budget year. Assumptions guiding the future estimates should be included along with the basis of the forecast calculations. A sample budget forecast is shown in Figure 1.9.

It is important to communicate clearly the tentative nature of these forecasts and to stress that they are based on assumptions about local and state policy decisions, economic conditions, demographic trends, and other factors that may change. Actual budgets for the forecast years will be developed in the year prior to their implementation and will be based on the most recently available data.

Enrollments. Student enrollments are a key factor in budget development. The number of students affects either directly or indirectly many of the expenditure and revenue projections, along with other intermediate projections such as teaching staff levels. Since enrollments tend not to undergo rapid changes except under extraordinary circumstances, it is useful to look at enrollment trends over time. The criteria call for a minimum of eight years of enrollment data: three prior years of actual enrollments, current year enrollment, projected budget year enrollment, and three additional years of projected enrollments.

Presentation of enrollment information can be by grade level, educational level (elementary, middle/junior high school, secondary), school, or any other

TABLE 1.5

Criteria for Informational Section of Budget

1. The document should provide a five-year summary comparison of revenues and expenditures for the three prior years actual, current year budget and/or estimated current year actual and proposed budget year for all governmental funds. Presentation of similar data for other funds is optional.
2. The document should present a minimum of three years of budget forecasts beyond the proposed budget year, which include beginning and ending fund balance, and revenue and expenditures for all governmental funds.
3. The document should present a minimum of three years of actual student enrollment history, the current budget and/or estimated current year enrollment, the proposed budget year enrollment and a minimum of three years of enrollment projections. Forecasting methodology and techniques must also be discussed as part of the presentation on enrollment projections.
4. The document should present personnel resource allocations of the school entity for a minimum of three years actual, current year budget and/or estimated current year actual and proposed budget year.
5. The document should present the assessed and market value of taxable property of the school entity for a minimum of three years actual, current year budget and/or estimated current year and proposed budget year.
6. The document should include the property tax rates and collections for a minimum of three years actual, current year budget and/or estimated current year and proposed budget year. The document should describe whether the tax rate is a rate (per $100) of taxable value of on some other form of rate.
7. The document should include an analysis of the budget's effect on taxpayers (tax burden on citizens) for a minimum of three years actual, current year budget and/or estimated current year and proposed budget year.
8. The document should include the bond amortization schedule(s) of the school entity.
9. The document should provide performance measures (quantitative and/or qualitative measurements of results) for a minimum of three prior years. Such performance measures may include standardized test scores, drop-out rates, accomplishment of goals and objectives, parent/student satisfaction surveys and/or other performance measures.
10. The document should include other information that would help the reader understand the past and future directions of the school entity.
11. The document should include a glossary of terms to improve understanding.

Source: Meritorious Budget Award Criteria, Association of School Business Officials International.

FIGURE 1.9

Budget Forecasts

ALPINE SCHOOL DISTRICT
Current Budgeted and 3 Year Projection
Governmental Funds
Revenues and Expenditures

	Budgeted 1997-98	Projection 1998-99	Projection 1999-2000	Projection 2000-01
Revenues:				
Property Taxes	$ 35,163,010	$ 38,626,299	$ 39,086,686	$ 39,790,777
Interest From Investments	3,893,900	3,440,736	3,508,174	3,608,859
School Lunch Sales	3,540,000	3,588,852	3,659,193	3,764,212
Other Local Revenue	2,241,537	2,272,470	2,317,010	2,383,508
State Revenue	130,114,606	131,910,188	134,495,628	138,355,653
Federal Revenue	8,843,932	8,879,812	8,931,358	9,007,998
Total Revenues	$ 183,796,985	$ 188,718,357	$ 191,998,049	$ 196,911,007
Expenditures:				
Salaries	$ 104,995,992	106,444,937	108,531,258	111,646,105
Employee Benefits	36,161,984	36,661,019	37,379,575	38,452,369
Professional Services	1,308,777	1,326,838	1,352,844	1,391,671
Property Services	1,233,828	1,250,855	1,275,372	1,311,975
Building Construction	8,438,010	-	-	-
Purchased Services	2,042,806	2,070,997	2,111,589	2,172,192
Supplies & Materials	14,473,937	14,673,677	14,961,281	15,390,670
Equipment, Vehicles, and Building/Site Improvements	7,282,223	7,382,718	7,527,419	7,711,559
Portable Building Purchase	807,500	120,000	80,000	80,000
Land Purchases	3,000,000	500,000	500,000	500,000
Debt Service Payment	15,491,800	15,482,474	15,481,794	15,497,519
Other	766,966	777,550	792,790	815,543
Total Expenditures	$ 196,003,823	$ 186,691,065	$ 189,993,922	$ 194,969,603
Excess (Deficiency) of Revenues over Expenditures	$ (12,206,838)	$ 2,027,292	$ 2,004,127	$ 1,941,404
Other Financing Sources:				
Operating Transfer In (Out)	$ (130,000)	$ (130,000)	$ (130,000)	$ (130,000)
Sale of Fixed Assets	1,000	1,000	1,000	1,000
Bond Proceeds	-	-	-	-
Total Other Financing Sources	$ (129,000)	$ (129,000)	$ (129,000)	$ (129,000)
Excess (Deficiency) of Revenues and Other Sources over Expenditures	$ (12,335,838)	$ 1,898,292	$ 1,875,127	$ 1,812,404
Fund Balances:				
Beginning of Year	28,980,334	$ 16,644,496	$ 18,542,788	$ 20,417,915
End of Year	$ 16,644,496	$ 18,542,788	$ 20,417,915	$ 22,230,319

Source: Alpine School District, American Fork, UT (Page 182-183)

FIGURE 1.9 *(continued)*

Budget Forecasts

Alpine School District
Three Year Budget Forecast
Projection Assumptions

The District will open two elementary schools and a high school in the coming fiscal year and there are not sufficient capital or bond funds to build additional schools in subsequent years. Therefore, no additional costs are added in the projected years for opening of schools. If the Board of Education does hold another bond election for additional schools, the amounts would have to be changed for the cost of opening the schools that were built. Most objects of revenue and expenditures are increased for the projected student enrollment growth for each year (FY99-1.38%; FY2000-1.96%; FY01-2.87%). No assumptions have been made for cost of living or WPU adjustments because these amounts generally are an offset of revenue and expenditures. All other changes to specific line items are noted below.

Revenues

Property Taxes – Changes made for the yearly change in debt service requirements. In addition, an amount has been added for FY99 because of the use of all fund balance in the Debt Fund to pay the 1997-98 debt requirement.

Interest – For fiscal year 1999 the amount of interest generated by the bond funds has been deducted because of the anticipated expenditure of all the funds at the close of fiscal year 1998.

Federal Revenue – All revenue kept at the same amounts except School Lunch, which is adjusted for student growth.

Expenditures

Building Construction – All projects using the past bond revenue are expected to be completed at the close of fiscal year 1998. The Capital Projects Fund revenue is not of a sufficient amount to undertake additional building construction.

Portable Building Purchase – For fiscal year 1999 the projection is to purchase additional units along with moving existing ones. The following years are an estimate of the cost of moving units between school sites as needed for enrollment changes.

Land Purchase – With the bond funds the district has been buying additional sites. For the projected fiscal years, the expenditure amount has been reduced to a level that was in place prior to bond dollars.

Debt Service Payment – Projection is per the bond schedule of payments.

useful manner. To emphasize the nature of the enrollment trends, accompanying graphs can provide a clear visual picture of past and current conditions along with future expectations. An illustration of enrollment projections by educational level is shown in Figure 1.10.

A description of the methodology used to make the enrollment projections should also be included. Techniques for projecting student enrollment are discussed in Chapter 4.

Personnel. Personnel costs (salaries and benefits) represent about 85 percent of the total costs in a typical school district budget. Therefore, information on the number and types of personnel employed by the school district is important in understanding the composition of the budget. Personnel counts are usually expressed in full- time equivalents (FTE), which is the number of persons calculated as if all were working on a full-time basis. This means that part-time employees are figured as fractional FTE amounts. For example, a half-time instructional aide would be counted as 0.5 FTE. Estimation of personnel requirements and their costs are discussed in Chapter 4.

The MBA criteria call for five years of personnel data: three prior years' actual staffing, current year staff, and projected budget year staffing requirements. These data should be presented by major personnel category and can include an educational level or school dimension, if desired. Additional information could include an analysis and explanation of the changes in personnel for the budget year. An example of a personnel report is given in Figure 1.11.

Property values and property taxes. Property taxes are the single most important source of local revenue. For school boards property taxes represent both their primary financial lever and a critical political decision on the level of taxation to adopt. However for most district residents, property taxes mean a substantial tax burden—either directly through property ownership or indirectly through rental payments to a landlord. A natural repercussion is that property taxes are a prime source of contention in many districts with strong pressures to keep the tax rate as low as possible. Consequently, useful information about taxable property and property taxes is essential to include in the budget. Property tax information should be presented in the budget for the three prior years' actual, the current year, and the projected budget year. Specific information concerning property taxes in the district should include value of property, tax rate, property tax collections, and the impact on taxpayers. Data over the five-year period allow relevant trends to be identified and noted in the budget.

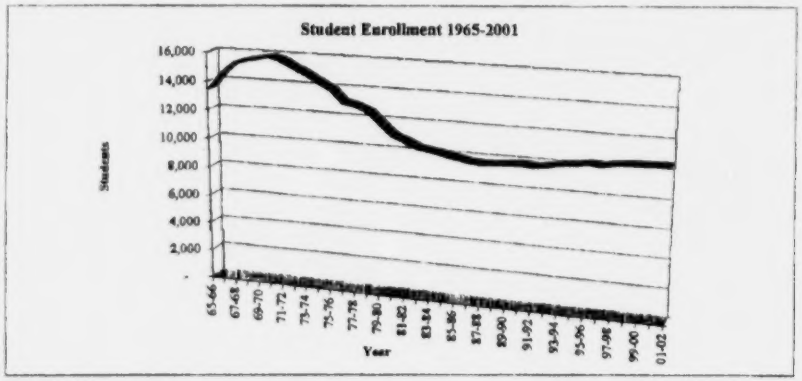
The amount of property taxes is determined by two factors: the taxable value of the property and the tax rate levied upon that property. The value of the property in the district should be presented in the budget in two related ways: market value and assessed value. An example of property values information is shown in Figure 1.12.

FIGURE 1.10

Enrollment Data

MSD of Washington Township, Indianapolis, Indiana
Student Enrollment by Grade Level[1]
Ten Fiscal Years

	Actual					Projected[2]				
Grade	1992-1993	1993-1994	1994-1995	1995-1996	1996-1997	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002
K	557	650	592	659	579	602	583	623	600	601
1-5	3,957	3,917	3,970	4,002	4,026	4,083	4,085	4,067	4,096	4,045
6-8	2,465	2,536	2,504	2,519	2,446	2,473	2,504	2,553	2,583	2,635
9-12	2,872	2,922	3,010	3,055	3,084	3,148	3,206	3,155	3,162	3,216
Total	9,851	10,025	10,076	10,235	10,135	10,306	10,378	10,398	10,441	10,497



[1] Source: Personnel Data and Pupil-Teacher Information, MSD of Washington Township

[2] Projected enrollment figures are calculated with the Gardner-Woller Enrollment, five year, moderated, most likely projection using birth data from the Marion County Health Department and 15 years of historical enrollment data.

Source: Metropolitan School District of Washington County, Indianapolis, IN (Page 112)

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FIGURE 1.11

Personnel Projections

SCHOOL AND CENTER STAFF (Shown in Equivalent F/T Positions) :

POSITIONS	Actual 1993-94	Actual 1994-95	Actual 1995-96	Actual 1996-97	Proposed 1997-98	Increase/ (Decrease)
INSTRUCTIONAL PERSONNEL:						
Basic K-12	6,360.85	6,558.41	6,623.40	7,038.80	7,394.40	355.60
At Risk	1,007.37	1,058.77	1,099.90	1,136.30	1,262.70	126.40
Exceptional	1,117.52	1,149.82	1,129.60	954.60	993.00	38.40
Voc Ed - 7-12	378.74	384.19	374.80	387.20	447.00	59.80
Adult	747.19	783.62	678.90	662.10	616.80	(45.30)
Other	130.65	146.16	266.10	165.30	87.00	(78.30)
TOTAL	9,742.32	10,080.98	10,172.70	10,344.30	10,800.90	456.60
ADMINISTRATIVE PERSONNEL:						
Principal	181.62	181.77	189.70	193.40	194.30	0.90
Assistant Principal	338.25	343.06	357.80	369.50	392.30	22.80
TOTAL	519.87	524.83	547.50	562.90	586.60	23.70
INSTRUCTIONAL SPECIALISTS:						
Media Specialist/Libr	194.77	197.20	201.40	200.80	219.00	18.20
Counselor/Director	364.68	371.49	390.70	384.60	424.10	39.50
ESE Specialist	115.59	129.48	149.40	133.40	183.20	49.80
Other	197.00	82.72	10.80	35.80	35.50	(0.30)
TOTAL	872.05	780.89	752.30	754.60	861.80	107.20
INSTRUCTIONAL SUPPORT PERSONNEL:						
Basic K-12	654.56	734.85	648.90	768.10	736.40	(31.70)
At Risk	199.07	201.30	166.00	164.10	227.40	63.30
Exceptional	389.34	358.02	343.60	352.40	361.10	8.70
Adult	29.45	35.44	43.80	44.50	59.30	14.80
Other	213.64	221.75	301.50	209.40	210.70	1.30
TOTAL	1,486.06	1,551.36	1,503.80	1,538.50	1,594.90	56.40
SCHOOL SUPPORT PERSONNEL:						
Clerical	1,349.31	1,382.52	1,142.60	1,346.20	1,592.80	246.60
Media Clerk	108.61	111.06	289.50	113.60	124.70	11.10
Head Facilities Serviceperson	238.28	239.30	246.60	250.50	265.30	14.80
Facilities Serviceperson	709.80	721.37	723.90	751.30	871.00	119.70
Yardman	51.82	51.00	48.90	53.50	71.50	18.00
Security Specialist	71.41	85.55	121.60	69.50	175.20	105.70
Other	24.15	35.09	41.10	41.60	60.40	18.80
TOTAL	2,553.38	2,625.90	2,614.20	2,626.20	3,160.90	534.70
TOTAL SCHOOL AND CENTER	15,173.67	15,563.96	15,590.50	15,826.50	17,005.10	1,178.60

DEPARTMENT STAFF:

POSITIONS	Actual 1993-94	Actual 1994-95	Actual 1995-96	Actual 1996-97	Proposed 1997-98	Increase/ (Decrease)
Administrative	258.10	248.60	259.80	246.90	248.30	1.40
Technical	137.00	152.00	144.00	156.00	156.00	0.00
Clerical	588.70	608.70	629.90	649.00	653.00	4.00
Bus Drivers and Attendants	903.00	1,258.00	1,419.00	1,226.00	1,226.00	0.00
B.T.U.	234.00	237.00	236.20	242.20	242.20	0.00
Other Positions	652.80	639.30	657.30	568.30	568.30	0.00
TOTAL DEPARTMENT	2,773.60	3,143.60	3,346.20	3,088.40	3,093.80	5.40
GRAND TOTAL ALL STAFF	17,947.27	18,707.56	18,936.70	18,914.90	20,098.90	1,184.00

Source: School Board of Broward County, Fort Lauderdale, FL (Page 25)

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The property tax rate is measured in the standard unit for the state, generally in mills or tax dollars per hundred or thousand dollars of assessed value. A discussion on determining property taxes in a district in provided in Chapter 4.

Not all property taxes levied in a given year are collected in the same year. To document the level of property tax collection, the budget should show both the amount of property taxes collected and the first-year collection rate. An example is provided in Figure 1.13.

Total property taxes for the district represent millions of dollars. For individuals, however, the impact may be substantial, even though the dollar amount is considerably smaller. To present the property tax levy in understandable individual terms, show the impact on a typical property owner. This is done by applying the district's property tax rate to a typical or average valued property and calculating the tax amount for that property. The change from year to year will indicate the annual increase over the past few years and that proposed for the budget year. An illustration showing the taxpayer impact is provided in Figure 1.14.

Debt amortization. For districts that have issued long-term debt, it is necessary to provide information about the amount and timing of debt service payments. This is most efficiently done in a table that provides the annual amount due for each of the district's debt issuances. An example is shown in Figure 1.15.

Performance measures. Budgets traditionally have not contained measures of a non-financial nature. With increased emphasis on accountability for results, the inclusion of district performance measures is an important step toward documenting district achievements and justifying the expenditure of public funds for public schools.

While non-financial performance measures are not necessarily as numerous, as precise, or as comfortable for school personnel, some are generally available in all school districts and more can be developed as emphasis is intensified. If possible, show results over a three-year period should to illustrate trends and demonstrate improvement. The specific performance measures used will depend on the individual district's circumstances. Examples from MBA program winning budgets are shown below to provide some guidance.

Student academic results
- SAT or ACT scores
- Standardized achievement test results
- State assessment test results
- Advanced Placement enrollments, examinations, and percentage passed
- International Baccalaureate diplomas earned

National, state, and regional awards and recognitions for students
- Number of National Merit Scholars

FIGURE 1.12

Assessed Value and Market Value of Taxable Property

TREDYFFRIN/EASTTOWN SCHOOL DISTRICT
Assessed and Market Value of Taxable Property
Last Ten Fiscal Years
(Unaudited)

Year	Market Value (1)	Total Assessment (2)	Percentage
1996-97	$ 3,333,158,800	$ 261,653,960	7.9
1995-96	3,112,562,900	257,979,610	8.3
1994-95	3,054,537,200	253,537,550	8.3
1993-94	2,924,917,400	255,539,800	8.7
1992-93	2,960,758,500	257,818,830	8.7
1991-92	2,619,211,800	256,783,730	9.8
1990-91	2,577,909,700	253,491,900	9.8
1989-90	2,134,201,900	245,029,250	11.5
1988-89	1,980,727,100	232,889,190	11.8
1987-88	1,530,747,500	223,053,390	14.6

Source: (1) Determined by the Pennsylvania State Tax Equalization Board (Latest Data Available)

(2) Chester County Board of Assessment Appeals, West Chester, Pennsylvania

Source: Tredyffrin/Easton School District, Berwyn, PA (Page 117)

FIGURE 1.13

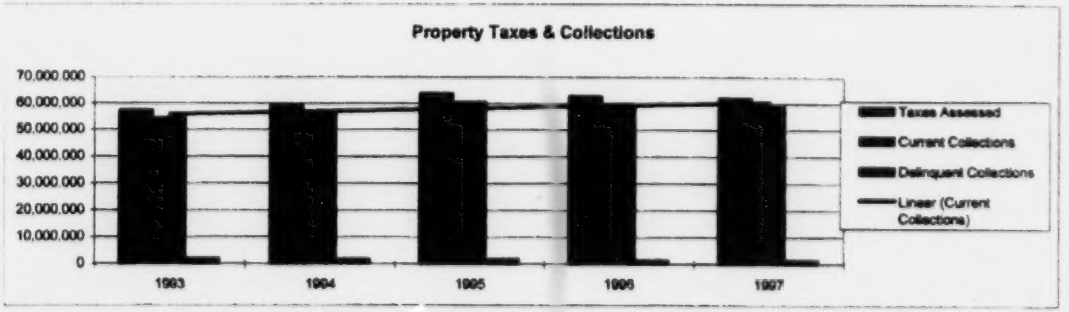
Property Tax Rate and Collections

SALT LAKE CITY SCHOOL DISTRICT

Property Tax Assessed and Collected

Years Ended 1993 through 1996 Actual and 1997 Estimated

Fiscal Year	Taxes Assessed	Current Collections	Current Collection Percentage of Taxes Assessed	Delinquent Collections	Total Tax Collections	Total Collections as Percent of Current Assessment
1992-93	57,503,538	54,543,445	94.85	1,973,493	$ 56,516,938	98.28%
1993-94	59,585,188	57,119,699	95.86	1,885,555	59,005,254	99.03
1994-95	64,030,283	60,732,861	94.85	1,812,629	62,545,490	97.68
1995-96	63,008,080	59,905,675	95.08	1,495,990	61,401,665	97.45
1996-97 (Estimated)	62,172,329	59,063,713	95.00	1,554,308	60,618,021	97.50



Note: This chart displays actual cash collections, while Chart 6 displays revenue recognized, including accruals.

Source: Salt Lake City School District, Salt Lake City, UT (Page 117)

FIGURE 1.14

Budget Impact on Taxpayers

FISCAL YEARS 1993-94 To 1997-98 IMPACT OF BUDGET ON TAXPAYERS

$50,000 HOME

	1993-94 Actual	1994-95 Actual	1995-96 Actual	1996-97 Actual	1997-98 Actual
Market Value of a Home	$50,000	$50,000	$50,000	$50,000	**$50,000**
Assessment Rate	4.00%	4.00%	4.00%	4.00%	**4.00%**
Assessed Value	$2,000	$2,000	$2,000	$2,000	**$2,000**
School Millage Rate Assessed	0.1169	0.1194	0.1303	0.1303	**0.1283**
Property Tax Due	$233.80	$238.80	$260.60	$260.60	**$256.60**
Property Tax Increase from Prior Year	$13.80	$5.00	$21.80	$0	**$(4.00)**

$100,000 HOME

	1993-94 Actual	1994-95 Actual	1995-96 Actual	1996-97 Actual	1997-98 Actual
Market Value of a Home	$100,000	$100,000	$100,000	$100,000	$100,000
Assessment Rate	4.00%	4.00%	4.00%	4.00%	**4.00%**
Assessed Value	$4,000	$4,000	$4,000	$4,000	**$4,000**
School Millage Rate Assessed	0.1169	0.1194	0.1303	0.1303	**0.1283**
Property Tax Due	$467.60	$477.60	$521.20	$521.20	**$513.20**
Property Tax Increase from Prior Year	$27.60	$10.00	$43.60	$0	**$(8.00)**

Note: Assessment rate of 4.00% based on primary (legal) residence only.

Source: Horry County School District, S.C. (Page 208)

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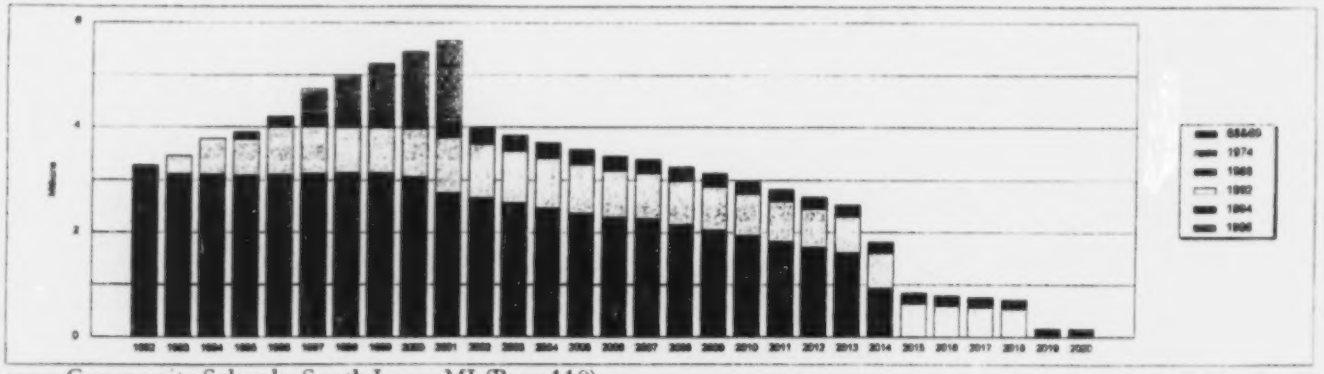
FIGURE 1.15

Debt Amortization

BOND AMORTIZATION SCHEDULE

Fiscal Year Ended 6-30	1998 General Obligation Bonds $4,100,000 Technology Project - District Wide			1994 General Obligation Bonds $3,500,000 6th Grade Wing - Middle School			1992 General Obligation Bonds $10,000,000 Elementary Additions/Remodel			1988 General Obligation Bonds $28,980,000 New High School			1974 General Obligation Bonds $4,070,000 Centennial Elementary			G.O.Bonds 1995,1989 P & I $1,900,000	Grand Total
	Interest	Principal	Total	Interest	Principal	Total	Interest	Principal	Total	Interest	Principal	Total	Interest	Principal	Total		
1992							328,828	0	328,828	1,801,005	981,139	2,882,144	110,350	175,000	285,350	107,900	3,275,394
1993							657,656	0	657,656	1,942,750	810,000	2,752,750	98,975	175,000	273,975	102,326	3,457,879
1994							657,656	0	657,656	1,865,193	895,000	2,760,193	87,425	175,000	262,425	96,750	3,777,024
1995				154,097	0	154,097	657,656	225,000	882,656	1,778,830	1,025,000	2,803,830	75,700	175,000	250,700	41,900	3,907,883
1996				205,462	0	205,462	657,656	225,000	882,656	1,712,756	1,135,000	2,847,756	63,800	200,000	263,800		4,186,674
1997	186,647	255,000	451,647	205,462	75,000	280,462	638,532	225,000	863,532	1,637,416	1,245,000	2,882,416	50,000	200,000	250,000		4,728,057
1998	**148,648**	**540,000**	**688,648**	**189,728**	**126,000**	**324,726**	**619,406**	**225,000**	**844,406**	**1,553,488**	**1,350,000**	**2,903,488**	**36,000**	**200,000**	**236,000**		**4,997,246**
1999	129,208	775,000	904,208	189,976	150,000	339,976	600,282	225,000	825,282	1,460,978	1,460,000	2,920,978	22,000	200,000	222,000		5,212,444
2000	100,145	1,055,000	1,155,145	180,600	150,000	330,600	581,156	300,000	881,156	1,373,378	1,485,000	2,858,378	13,000	200,000	213,000		5,438,279
2001	58,000	1,475,000	1,534,000	172,650	150,000	322,650	555,656	475,000	1,030,656	1,282,792	1,480,000	2,762,792					5,650,098
2002				164,700	150,000	314,700	525,376	475,000	1,000,376	1,191,032	1,480,000	2,671,032					3,986,108
2003				156,750	150,000	306,750	496,876	475,000	971,876	1,098,532	1,470,000	2,568,532					3,847,158
2004				148,800	150,000	298,800	468,332	475,000	943,332	1,005,922	1,465,000	2,470,922					3,713,054
2005				140,850	150,000	290,850	439,162	475,000	914,162	912,162	1,460,000	2,372,162					3,577,174
2006				132,750	150,000	282,750	409,476	475,000	884,476	817,262	1,480,000	2,297,262					3,464,488
2007				124,500	150,000	274,500	379,312	475,000	854,312	721,062	1,550,000	2,271,062					3,399,874
2008				116,100	150,000	266,100	349,032	475,000	824,032	620,312	1,540,000	2,160,312					3,250,444
2009				107,550	150,000	257,550	318,750	500,000	818,750	524,062	1,530,000	2,054,062					3,130,362
2010				98,850	150,000	248,850	286,876	500,000	786,876	428,438	1,515,000	1,943,438					2,979,164
2011				90,000	150,000	240,000	255,000	500,000	755,000	333,750	1,500,000	1,833,750					2,828,750
2012				81,000	150,000	231,000	223,126	500,000	723,126	240,000	1,485,000	1,725,000					2,679,126
2013				72,000	150,000	222,000	191,250	500,000	691,250	147,188	1,470,000	1,617,188					2,530,438
2014				63,000	150,000	213,000	159,376	500,000	659,376	55,312	885,000	940,312					1,812,688
2015				54,000	150,000	204,000	127,500	500,000	627,500								831,500
2016				45,000	150,000	195,000	95,626	500,000	595,626								790,626
2017				36,000	150,000	186,000	63,750	500,000	563,750								749,750
2018				27,000	150,000	177,000	31,876	500,000	531,876								708,876
2019				18,000	150,000	168,000											168,000
2020				9,000	150,000	159,000											159,000



Source: South Lyons Community Schools, South Lyon, MI (Page 110)

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Academic awards from national societies
Academic contest winners (individual and team)
Talent awards for artistic and musical achievement
Amount of scholarship awards won

National, state, and regional awards and recognitions for teachers, staff, and schools

Teacher of year awards, general and by discipline
Counselor of year award
School awards for academic excellence

School and district program measures

Graduation rate
College attendance rate
Attendance rate
Dropout rate
Retention rate
Alumni, parent, and/or student survey results concerning quality of academic program

District achievements

Program improvements implemented
Technology enhancements
Accomplishment of specific district objectives
Documented cost savings
Completion of major capital projects.

Other information. This section offers the opportunity to present additional data or information that have not been included in other areas. This could contain special analyses, information on issues particular to the district, or other information useful to the school board, parents, community members, and school staff.

Glossary. A number of terms used in the budget document have specific meanings. A glossary of the major terms should be included to prevent misunderstanding.

Conclusion

The budgeting process is one of the most important means of deliberating and policy making for the school district. Developing the budget for the upcoming year affords the opportunity to think about and plan the district's educational programs. It specifies the anticipated purposes and amounts to be spent during the upcoming budget year in great detail for all district personnel and the community to see. The

process forces the district and those preparing the budget to be specific about what resources they wish to purchase next year, in what quantity, and for what purposes. It also makes it possible to compare the district's stated educational goals and objectives with the proposed use of the available funds. If there are important discrepancies they can be identified, debated, and rectified. In its operation, the budget implements the district policies established through the budgeting process. As a result, final resource allocation decisions adopted in the budget reflect the district's actual educational priorities.

The budget should also be a vehicle for introducing some long-range planning into the traditional short-range focus of school district planning. Certain programs may start small, but be expected to grow significantly. Expenditures made without an eye to the future may result in wasteful and unnecessary costs. The introduction of microcomputers into the schools' curriculum is a prime example. Hardware and software purchases should be both compatible with expected later purchases and useful in the anticipated future curriculum. This is a particularly difficult task given the rapidly changing and improving use of microcomputers in education. A planning and budgeting process, however, that asks for justification of requested expenditures forces some consideration of these difficult questions.

The budget is also the mechanism for making the difficult allocation decisions in the school district. At the district level, resources must be allocated among elementary, middle, or high schools; and between regular and special education. At the school level, choices must made between core academic or elective subjects, or among different academic programs. The need to complete the budget document requires those involved to resolve differences in opinions and educational priorities.

This book may present the budgeting process and its associated activities as rational, well ordered, and logically structured. To some extent this is true. There is a budget calendar giving dates, an assignment of responsibilities for specific tasks to individuals, an organizational structure to perform the work, and a management strategy for carrying out the budget process. However, this does not represent the whole picture. The budget process has many conflicting aspects, which must be understood.

Rational and subjective. The budget process is a rational undertaking that identifies goals and objectives and then assigns resources to particular programs to achieve the stated goals. However, establishing the goals and objectives is a highly subjective undertaking, and those involved make decisions based largely on personal beliefs and values. Principals, teachers, central office administrators, superintendents, school board members, parents, and special interest groups all have opinions of which activities are more important and strive to see them reflected in the district's budget.

Constrained and flexible. Districts are limited, among other things, by available funds from the state and federal government, by the local property taxes that can be raised, and by numerous statutes and regulations. However, there is frequently a great deal of discretion at the district and school building level on exactly how those revenues will be spent.

Reasonable and arbitrary. Many of the decisions in the budget process involve professional judgment and personal values. The variety of persons participating in the process generally keep the decisions from becoming unreasonable or too biased. However, there are often no definitive right or wrong answers to such questions as the appropriate student/teacher ratio in elementary schools, and sometimes such decisions have to be arbitrary.

Precise and uncertain. The budget has specific dollar amounts for each expenditure and revenue item. The columns of numbers give an impression of precision and accuracy, particularly in a printed, computer-based presentation document. However, those who have developed the budgets are aware that the numbers are largely estimates and represent their best guess at what will happen next year. Within the overall expenditure level, most budgets generally contain some "wiggle room"—monies that can be shifted around from one program to another during the year to meet unexpected changes in operations or to take advantage of opportunities that occur. Administrators should be aware of this possibility and knowledgeable about which budget categories or areas have potentially available funds that might be shifted to better uses.

Open and concealed. The budget document for school districts provides an enormous amount of financial information. This is even more true of budgets that meet the MBA criteria. However, there is probably an equal amount that is not presented. The worksheets, planning assumptions, and alternative spending plans are generally not included or made available to the public as these documents are too bulky, hard to decipher, or too technical for outsiders to understand readily.

Specialized and public. The document is prepared by educational specialists and represents their proposal of the amount and type of education that should be provided by the school district. However, the plan is reviewed, modified if necessary, and approved by the lay public—either represented by elected school board members or by the district voters. This creates an automatic tension between professional expertise and lay concerns over both program and costs.

Educational goals and political reality. The budget is a compromise between the desire to improve educational programs and the need to gain public support through acceptable spending and taxing levels. It is a continual balancing act. There are always many excellent proposals for new, better, more effective educational programs, but these programs cost money and taxpayers and the school board often have a strong interest in keeping costs down.

These conflicts will never be fully resolved and are present throughout the budget process. However, it is useful to make note of them and to think about how school administrators can work to reconcile the differences and minimize the disruptions they could cause.

Above all, the budget should be a useful document and the budget process should be one that aids the effective management of the school district. School administrators should recognize that the budget is ultimately a device for achieving educational goals. Consequently, they should understand the budget thoroughly and be able to use both the document and the process in positive ways to accomplish the educational purposes of their school, department, or district.

Problems

1.1 Obtain a copy of your school district's budget document and use it to:
a.) Identify the different sections of the document. Are all four sections described in this chapter present (Introductory, Organizational, Financial, Informational)? Which, if any, data elements from within the sections are missing? What, if any, additional information has been included?
b.) If you are employed in the district, locate the budget entry containing your salary. Locate the budget entry that contains the costs of the business office.
c.) What percentage of the expenditures is budgeted for instruction? What proportion of the instructional expenditures are for elementary schools, for middle schools, and for high schools? Do these represent all of the instructional expenditures of the district?
d.) What percentage of the revenues comes from local, intermediate, state, and federal sources?

1.2 Prepare suggestions on how your district budget document could be modified to improve communication with school board members and the district patrons.

Notes

2 Organization for Budgeting

Introduction

The budgeting process is complex. It involves numerous people all through the school district and in the community. A single budget cycle covers a period of almost two years from start to finish and requires a multitude of activities during that time. Throughout the process, numerous special interest groups, both inside and outside the school district organization, bring pressure to bear to meet their particular interests. Frequently, these interests conflict. Budgeted revenue and expenditure amounts are both subject to change, and the budget process must regularly incorporate updated information to modify previously established figures. In short, it is a difficult process to manage effectively, but one of enormous importance to the well being of the school district.

This chapter provides an organizational context for the more technical and detailed material on budget accounting, preparation, adjustments, marketing, and management in following chapters. Before delving into those areas, it is necessary to understand how to work within the district's established organizational structure for the budgeting process. This chapter will cover the basic questions of budget organization:

1. What type of approach to budgeting will be used?
2. What activities have to be carried out?
3. When do the activities have to be accomplished?
4. Who is responsible for doing the activities or seeing that they are accomplished on time and in the proper manner?

To answer these questions, this chapter concentrates on three major topics: alternative approaches to budgeting, the budget calendar, and organizational structures for budgeting. These aspects are closely related. The budgeting approach chosen provides the structure for the budget process and dictates, in general, the required activities. The budget calendar designates what specific things have to be done and when. The organizational structure identifies who is responsible for each activity and what other persons or groups should be involved.

Approaches to Budgeting

The approach to budgeting refers to the general methodology and format used in developing the budget estimates and preparing the budget document. The principal

approaches to budgeting used by school districts are line-item budgeting, function/object budgeting, planning programming and budgeting systems (PPBS), zero-based budgeting (ZBB), and, more recently, site-based budgeting.[1]

These approaches reflect a variety of management objectives sought through the budget: cost control, organizational responsibility and accountability, improved program planning, output measurement and evaluation, political control, priority setting, communication of important fiscal information, greater participation from stakeholders, and reallocation of resources toward more efficient and/or desired areas. Each approach relates to all of the objectives in some fashion, but they differ in format and the emphasis. Activities required during the budget process will also vary with the approach selected.

Line-Item (Object) Budgeting

> *Line-item budgeting is a technique in which line items, or objects of expenditure—personnel, supplies, contractual services, and capital outlays—are the focus of analysis, authorization and control.*[2]

The line-item approach was the most common approach through the 1960s. It is also known as "traditional" budgeting.[3] Its emphasis on identifiable items provided educational managers and school board members with a budget that was easily understood and controlled. As a historical example, the complete line-item budget for Springfield, Oregon, for the school year 1922-23 is shown in Figure 2.1.

With line-item budgeting, attention is given to the items purchased, rather than the purpose of the expenditures. Strict adherence to the line-item approach results in a format that is inappropriate for either planning or managing today's more diverse and complex school districts. The problem is that the line items for different operations are aggregated to yield a single total amount. There is no provision for identifying or planning separate expenditures for different schools, different types of students, or different grade levels. For example, all teachers' salaries in the district would be combined into one total. No information would be readily available on the salary expenditures for high schools versus elementary schools, instructional expenditures for regular students compared to handicapped students, expenditures for a particular school, or for any other category useful for managing district operations.

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1. National Advisory Council on State and Local Budgeting, *A Framework for Improved State and Local Government Budgeting and Recommended Budgeting Practices, Draft October 22, 1995* (Chicago, IL: Government Finance Officers Association, 1995), p. 2.

2. Barry M. Mundt, Raymond T. Olsen, and Harold I. Steinberg, *Managing Public Resources* (New York: Peat Marwick International, 1982), p. 36.

3. Robert E. Everett, Raymond L. Lows, and Donald R. Johnson, *Financial and Managerial Accounting for School Administrators* (Reston, VA: Association of School Business Officials International, 1995), Glossary, p. 45.

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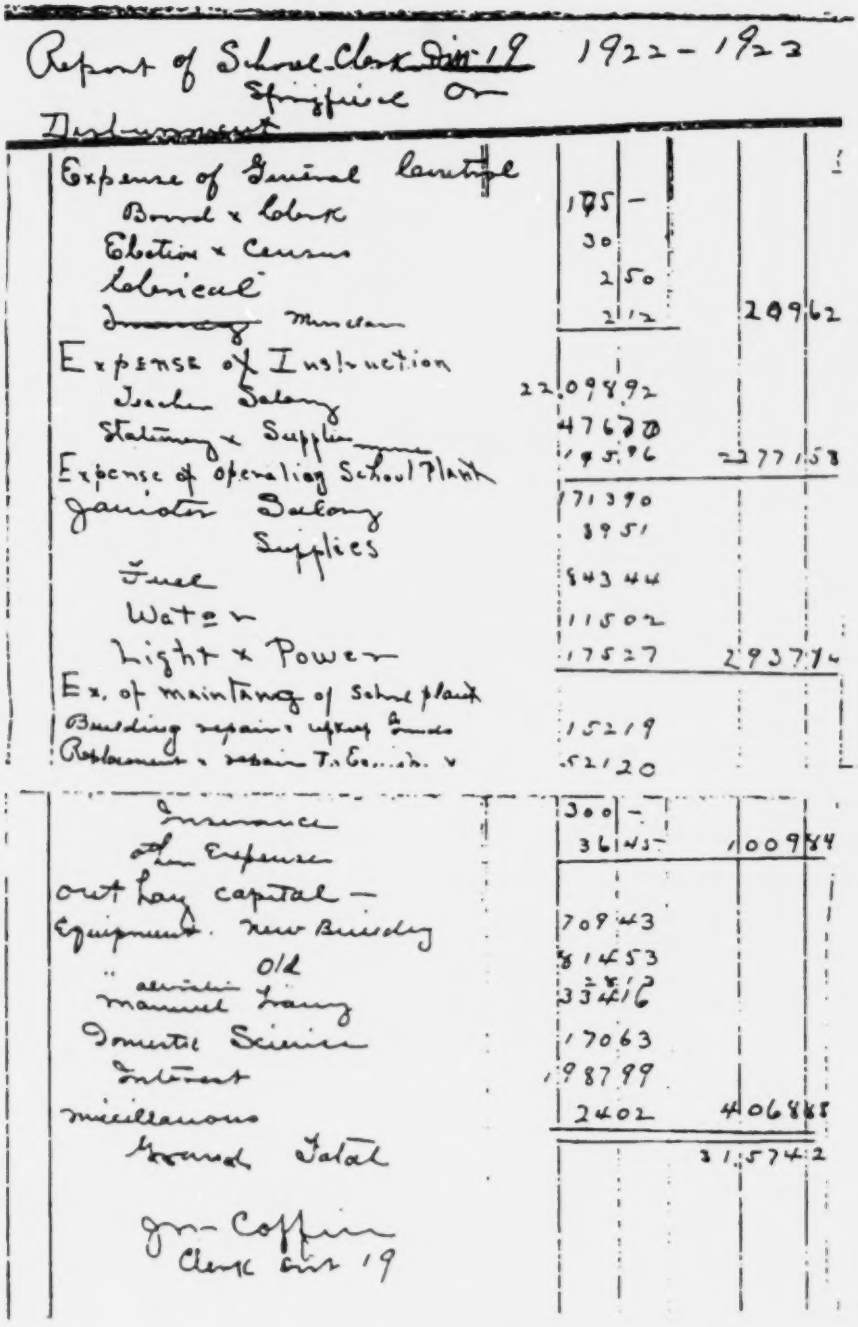
FIGURE 2.1

Report of the School Clerk

District 19, Springfield, Oregon District 1922-23



Report of School Clerk Springfield Dist 19 1922-1923

Expense of General Control			
Board & Clerk	175 –		
Election & Census	30		
Clerical	250		
Incidentals Miscellaneous	212	2096	2
Expense of Instruction			
Teachers Salary	22098 92		
Stationery & Supplies	476 70		
Text Books	1959 6	23771 58	
Expense of operating School Plant			
Janitors Salary	1713 90		
Supplies	89 51		
Fuel	843 44		
Water	115 02		
Light & Power	175 27	2937 14	
Ex. of maintaining of School plant			
Building repairs upkeep & grounds	1521 9		
Replacement & repair Tr. Equip. &	521 20		
Insurance	300 –		
Other Expenses	361 35	1009 84	
Out lay capital –			
Equipment. New Building	709 43		
" Old	814 53		
" special manual Training	334 16		
Domestic Science	170 63		
Interest	1987 99		
miscellaneous	2402	4068 88	
Grand Total		31574 2	

Jos. Coffin
Clerk Dist 19

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However, the line-item approach does provide useful and essential information. The solution is to use this approach in combination with others to overcome its limitations. In fact, all of the other budgeting methods use a line-item approach as a basic element in the organizing and developing of their data.

Function/Object Budgeting

In function/object budgeting expenditures are organized around the major functional categories or purposes of district activities. Specific line-item expenditures are collected and presented under their related function.

Function/object budgeting is the most common approach to school district budgeting. This approach organizes the budget around the major functions in the district—primarily Instruction and Supporting Services—but may also include Operation of Non-Instructional Services, Facilities Acquisition and Construction Services, and Other Uses.[4] These functions are further divided into more specific subfunctions, such as high school instruction, programs for physically handicapped, guidance services, school administration, fiscal services, or operation and maintenance of physical plant. Within each function or subfunction, the expenditures required to carry out the necessary activities are estimated and reported on a line-item basis. This provides budget information in two important dimensions—the purposes of the expenditure (function or subfunction) and the specific items purchased (object). The function dimension identifies the "why" of educational expenditures, while the line-item approach specifies the "what" to be purchased.

By design, this program structure closely matches the way in which responsibilities are assigned. The program functions and subfunctions correspond to the organizational structure used by most school districts. This results in an effective and efficient budgeting structure with clear lines of authority and accountability. Each budget category is assigned a single individual for both organizational and fiscal responsibility. Consequently, function/object budgeting is the approach used by most states and school districts for education.

The function/object budgeting approach—a combination of line-item specification of expenditures within each budget subfunction—is the approach recommended by this book. The function/object specification is used by the accounting system to record and report budgeting and other fiscal data. Chapter 3 describes how the accounting structure is used as an outline for the budget.

Figure 2.2 presents an excerpt from a school district's current function/object budget. The function/object format is identical to the expenditure budget illustrated in Chapter 1 under the MBA criteria. The portion shows several subfunctions of support

4. William J. Fowler, *Financial Accounting for Local and State School Systems 1990* (Washington, DC: National Center for Educational Statistics, 1990), p. 26-29.

FIGURE 2.2

Function/Object Budget

GENERAL (OPERATING) FUND
EXPENDITURE BUDGET BY FUNCTION AND OBJECT (Continued)

Function Object	Budget 1997-98	Budget 1998-99
2400 SUPPORT SERVICES-PUPIL HEALTH		
100 Personal Services – Salaries	$ 371,338	$ 370,709
200 Personal Services – Benefits	103,276	96,299
300 Professional Services	4,417	1,600
400 Purchased Property Services	650	300
500 Other Purchased Services	500	0
600 Supplies	4,575	4,700
700 Equipment	950	0
TOTAL SUPPORT - PUPIL HEALTH	485,706	473,608
2500 SUPPORT SERVICES-BUSINESS		
100 Personal Services – Salaries	323,875	329,025
200 Personal Services – Benefits	116,069	108,466
300 Professional Services	5,000	5,000
400 Purchased Property Services	1,000	1,000
500 Other Purchased Services	34,000	34,000
600 Supplies	31,500	26,500
700 Equipment	15,000	15,000
800 Other Objects	2,000	2,000
TOTAL SUPPORT – BUSINESS	528,444	520,991
2600 SUPPORT SERVICES-OPERATION AND MAINTENANCE OF PLANT		
100 Personal Services – Salaries	1,043,143	1,084,485
200 Personal Services – Benefits	339,853	332,065
300 Professional Services	16,500	16,500
400 Purchased Property Services	1,501,000	1,506,000
500 Other Purchased Services	164,500	172,700
600 Supplies	375,500	375,500
700 Equipment	11,000	11,000
800 Other Objects	5,000	5,000
TOTAL SUPPORT - OPERATION AND MAINTENANCE OF PLANT	3,456,496	3,503,250

Source: Owen J. Roberts School District, Pottstown, PA (Page 82)

services—public health, business, and operation and maintenance of plant—and presents the types of expenditures planned for these areas. It is but a small part of a district's total budget. The complete budget would have similar budgets for all areas of instruction and by each support and administrative subfunction. Chapter Four 4 provides a detailed description of how budget amounts are specified.

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Program, Planning, and Budgeting Systems (PPBS)[5]

Program budgeting is a technique that formulates spending plans and makes appropriations based on expected results of services to be performed by organizational units.[6]

In a PPBS approach, the budget is organized around a program structure based on district educational objectives—e.g., learning fundamental intellectual skills, learning about the world, and developing the individual physically, socially, and emotionally. The expenditures are grouped by corresponding objectives, rather than by the district's organizational structure or standard accounting categories as in the function/object approach. Consequently, expenditures in a single budget category can cut across organizational boundaries and require additional steps in the accounting system to redistribute the costs to the appropriate objectives. This approach is sometimes called PPBES, where the E stands for evaluation.

The principal steps in implementing a PPBS approach in education are:

1. Identifying and defining the school district's mission, goals, and objectives, and clarifying the desired outcomes.
2. Specifying alternative approaches or programs for achieving these outcomes.
3. Translating the alternative programs into fiscal and non-fiscal requirements. This includes planned expenditures and proposed revenue sources for a program. Ideally, this is done for a multi-year period, and not for a single budget cycle.
4. Analyzing each alternative approach to determine its cost effectiveness.
5. Selecting the best combination of programs and establishing the optimum course of action for the district, based on the analysis.
6. Reviewing and assessing each program, once implemented, to determine to what degree the desired outcomes were achieved.
7. Feeding these evaluations back into the system at the beginning of a new cycle.[7]

Two primary problems have emerged in the efforts to apply PPBS to educational budgeting: 1) the complexity and difficulty of establishing a program structure with useful objectives for managing educational operations; and 2) the mismatch between the organizational structure responsible for operating the programs and the budget categories.[8] As a result, there has not been widespread use of the PPBS approach in school district budgeting.

5. Hack et al., *School Business Administration*, pp. 134-139, provides a description of PPBES applied to education. For earlier descriptions, see Harry Hartley, *Educational Planning-Programming-Budgeting: A Systems Approach* (Englewood Cliffs, NJ: Prentice-Hall, 1968) and William H. Curtis, *Educational Resources Management System* (Chicago, IL: Research Corporation of the Association of School Business Officials, 1971).

6. Mundt, Olsen, and Steinberg, *Managing Public Resources*, pp. 39.

7. Wood et al., *Principles of School Business Management*, pp. 12-14 and 12-15.

8. Michael W. Kirst, "The Rise and Fall of PPBS in California," *Phi Delta Kappan* vol. LVI, no. 8 (April 1975), pp. 535-538.

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However, PPBS has many features that are useful and can be incorporated into the budgeting process. These include specifying the district's educational objectives, identifying alternative means to reach the objectives, developing multi-year cost estimates for the alternatives, selecting the most cost-effective alternative, emphasizing achievement of objectives and accountability, and evaluating the outcomes for use in future years' decision making. These features, however, are not the exclusive property of PPBS and can be used by any budgeting approach without the sometimes cumbersome PPBS program structure.

Zero-Based Budgeting

> *In zero-base budgeting "decision packages" are prepared to describe the funding of existing and new programs at alternative service levels—both lower and higher than the current level. Funds are allocated to programs based on rankings of these alternatives.*[9]

This is yet another way to organize a budget. Its basic concept is to build and justify the entire budget each budget cycle. It attempts to avoid incremental budgeting, in which the existing budget is not questioned, and attention is focused only on the new amounts or additions to be added. Rather, zero-base budgeting considers the entire budget each year and requires comparisons among all budget areas.

Obviously, zero-base budgeting is a time consuming process if followed completely. It forces comparisons of and choices among programs and activities that are often difficult to compare adequately. Further, it is known at the outset of the budgeting process that many educational programs will be continued from year to year; consequently, it is not necessary to go through the exercise of justifying them annually.

Zero-base budgeting has not been widely adopted by school districts. However, similar to PPBS, it has useful concepts that can be incorporated into a district's budget process, particularly when budget cutbacks are required. These would include conducting a periodic, full- scale review of operations (on a rotating basis), analyzing alternative means to accomplish an objective, or examining the consequences of not funding an activity.[10]

Conclusions

In reality, the state's educational accounting manual and associated regulations may dictate the format for reporting a district's final budget. However, district administrators usually have sufficient flexibility to select a particular approach for building their budgets. The choice will be influenced by the economic and political condi-

9. Mundt, Olsen, and Steinberg, *Managing Public Resources*, pp. 46.

10. For a discussion of ZBB and its advantages and disadvantages, see Hack et al, *School Business Administration*, pp. 139-142.

tions facing the district. A district needing to reduce its budget to match falling revenues may wish to incorporate a ZBB approach in various program areas to evaluate and compare the effects of cutbacks as an aid in establishing budget priorities. Another district, involved in reformulating its educational objectives, could include some aspects of a PPBS approach to link the programmatic and fiscal planning activities. However, without any strong pressures to the contrary, a function/object budgeting approach is usually appropriate.

Budget Calendar

A budget calendar for a school district is a listing of all activities required during the budgeting process, arranged chronologically by month. As such, the budget calendar has several important purposes. First, it schedules all critical budget-related activities at the time they should be properly done and establishes deadlines for their completion. This step, which requires a careful review and specification of all budget-related activities, should include all-important budgeting tasks. Second, the calendar allows districts to plan and carry out their budgeting processes efficiently. Third, it functions as a management tool to monitor the critical activities of the budget process to make sure that they are completed at their scheduled times. Fourth, the budget calendar also serves as a communication device within the district. The monthly list of activities notifies members of the school district organization and community about the major events scheduled during the year (e.g., deadlines for schools' submission of budget requests to district office, public budget hearings, school board meetings for budget approval, budget elections). A diagram of the major activities in the budget development process taken from a MBA winning district budget document is shown in Figure 2.3.

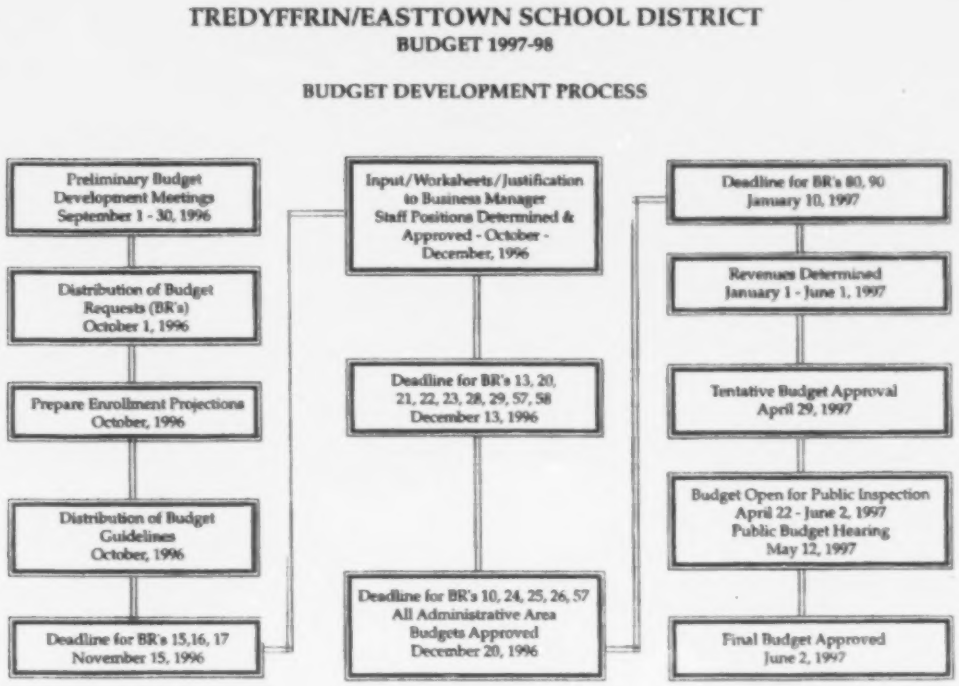
The timetable provided by a well-prepared budget calendar informs districts when they have to begin work on various budgeting activities to complete them at the required time. If the interconnected activities are identified and arranged in an efficient and feasible time sequence, the budgeting process will proceed smoothly. If not, last minute rushes with their inevitable mistakes and omissions will plague the process.

Content of the Budget Calendar

What goes into the budget calendar? The general answer is all important activities in the budgeting process, their start and/or completion dates, and perhaps, the person or position responsible for the activity. This answer, however, begs the question of what activities are important enough to be included in the budget calendar. There is no uniform definition of what is "important enough." What might qualify in one district might be omitted in another. The test is whether the district administration feels the activity should receive attention and be identified

FIGURE 2.3

Diagram of Budget Development Process


TREDYFFRIN/EASTTOWN SCHOOL DISTRICT
BUDGET 1997-98
BUDGET DEVELOPMENT PROCESS
Preliminary Budget Development Meetings September 1 - 30, 1996
Distribution of Budget Requests (BR's) October 1, 1996
Prepare Enrollment Projections October, 1996
Distribution of Budget Guidelines October, 1996
Deadline for BR's 15,16, 17 November 15, 1996
Input/Worksheets/Justification to Business Manager Staff Positions Determined & Approved - October - December, 1996
Deadline for BR's 13, 20, 21, 22, 23, 28, 29, 57, 58 December 13, 1996
Deadline for BR's 10, 24, 25, 26, 57 All Administrative Area Budgets Approved December 20, 1996
Deadline for BR's 80, 90 January 10, 1997
Revenues Determined January 1 - June 1, 1997
Tentative Budget Approval April 29, 1997
Budget Open for Public Inspection April 22 - June 2, 1997 Public Budget Hearing May 12, 1997
Final Budget Approved June 2, 1997

Source: Tredyffrin/Easton School District, Berwyn, PA (Page 32)

separately as a necessary and significant task to be accomplished during the budget process.

Planning and preliminary steps. These are activities concerned with organizing and planning the budget development process. Included are such events as holding budget planning and orientation meetings for the school board, administrators, and the community; developing the budget calendar; collecting data; establishing expenditure and tax rate parameters for the budget year; and developing guidelines, materials, and instructions for budget preparation.

Budget development. Activities in this area are directly related to developing the expenditure and revenue estimates and other components of the budget document. Activities that might be included in a budget calendar are preparing enrollment projections, staffing estimates, school and district department expenditure requests, revenue estimates, supporting material for the organizational and informational components of the budget, and the budget document itself.

Review and approval. These are generally activities or actions that involve the school board, other public bodies, and the voting public. While school district

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personnel are primarily responsible for developing budget requests, the proposed uses of public funds customarily require some form of public review and approval. Common activities include receiving, reviewing, and approving the proposed school district budget; budget elections; appropriations for spending in the upcoming year; and property tax and other tax levy declarations.

Beginning a new budget year. After the budget has been approved, there are still some logistical steps necessary to start the new year properly and accurately. These include closing accounts for the old year, opening accounts for the new year, and distributing approved budget spending limits to budget heads.

Developing the Budget Calendar

How does a school district develop a useful budget calendar? As most districts have some form of budget calendar in use, the logical beginning point is the current year's calendar. It should be examined for adequacy and accuracy, with any dissatisfactions noted for possible modification in next year's calendar. Anticipated changes in the district's budgeting process or state requirements that would change the budgeting activities or timing for the upcoming year should also be included in the new calendar.

Creating a new budget calendar for the upcoming year, whether a simple modification of the current year's budget calendar or the development of an entirely new one, can be carried out in five steps. If the procedure primarily calls for modify the existing budget calendar, many of the necessary decisions will already have been made. Nevertheless, it is useful to review them to make sure that they are still appropriate.

1 *Determine level of detail.* The first step in establishing a budget calendar is deciding the level of detail to be specified. General activities (e.g., estimate expenditures) provide little guidance for the actual work to be done or its timing. On the other hand, detailed activities create a bulky budget calendar, which is time consuming to prepare, difficult to use, and unnecessary for many participants.

How do district administrators decide what is the appropriate level of detail for their district's budget calendar? It depends on who will use the calendar and for what purposes. For example, a single-page calendar outlining activities of the school board in budget development may be appropriate for keeping the board informed of the overall process and alerted to actions required of them (e.g., April—first presentation of the school district budget request to the school board at the regular board meeting). The lack of detail in the calendar for board members can also keep them properly focused on policy considerations and away from the day-to-day operating activities of developing the budget.

On the other hand, the business manager needs a more detailed listing to organize the specific activities needed to complete the budget

accurately and on time (e.g., complete the revenue estimates by individual source, publish notices informing the public of the budget meeting(s) 10 days before the meeting is scheduled). Other participants in the process, such as building principals, will be heavily involved in only parts of the budget development. For them, a partial, but detailed calendar covering their involvement and responsibilities along with the overall major activities might be appropriate.

For a given district, the basic information contained in these different calendars will be the same, but provided in a different level of specificity or covering only a part of the process. This suggests the creation of a master detailed calendar used by central administrators to monitor and direct the overall process and a series of nested sub-calendars developed by condensing or segmenting the master calendar. An alternative to sub-calendars could be separate documents providing information on the budgeting activities and their timing, or a series of budget memoranda to the participants. Either method can be effective in coordinating the related budgeting activities.

2. *Identify activities.* There are two methods for identifying the necessary activities to be carried out in the budget process during the year: activity-oriented and time-oriented. The activity method is based on identifying series of related activities and then arranging them by date. The major categories of budgeting activities for the upcoming year are identified, and then the sub-activities are specified at a predetermined level of detail. All major activities and their respective sub-activities are then combined in chronological order and shown by month on the calendar.

   The time-oriented method focuses on a time period, generally a month, and identifies all of the activities that should occur during that period. This approach is useful when some of the activities are specific to a particular date (e.g., school board approves district budget on the first Tuesday of June).

   In practice, a combination of the two methods is useful, relying on the activity-oriented method to think through the sequence of activities and supplementing those with date-specific activities through the time-oriented method.

3. *Specify dates.* In addition to the particular activities, it is also necessary to specify the dates they occur. Frequently, this information is developed at the same time as the activity specification.

   Two types of dates can be included in the budget calendar: the date on which an activity should begin and the date on which the activity should be completed. Both are useful in managing the budget process. The beginning date notifies administrators and others of the time when work on the

task should start and the ending date sets a deadline to ensure that the budget process is not delayed.

Some activities may have dates that are mandated by statute or regulation. For example, state law may permit a district to hold budget elections only on specified dates, or a budget meeting may have to be announced in the local newspaper 10 days before it is held. The mandated dates for activities such as these can be used directly in scheduling events in the budget calendar.

Depending on the overall schedule, the district may have some leeway in timing certain activities. This allows flexibility in planning for these activities. For example, the district may decide that it wants to complete certain activities early to get them out of the way, or it may decide to schedule activities across several months in order to smooth out workloads, or it may decide to delay certain activities to wait until additional information may become available. The best choices for some of the discretionary dates may be known in advance by administrators based on past experience, but others will only become apparent by trying to fit all of the necessary activities into the budget calendar.

4. *Identify responsible personnel.* The who of an activity is just as important as the what. Thus, it is important to identify the person or position responsible for carrying out each activity. This also provides a contact to ask questions or obtain more information about the activity, to coordinate related activities, to provide relevant data, and to contact for other necessary interactions. This listing also serves to communicate who to hold accountable for completion of the activity.

A variety of people or positions can be involved in the budgeting process in one fashion or another. Obviously, the superintendent, assistant superintendent(s), business manager, and director of personnel will be heavily involved, as will other central office staff, such as those responsible for elementary and secondary curriculum, special education, physical plant, transportation, and food services. At the school level, the building principals, other administrators, and clerical staff have work to do in developing their budget requests. Table 2.1 provides a list of "budget heads" identified by a Pennsylvania school district who have responsibility for developing a portion of the budget.

It may be useful to identify not only the person with primary responsibility for an activity, but also those persons or groups that should be informed or consulted about it. Many others may be involved in providing input on priorities and assisting to develop budget components. Depending on the school grade level and the management strategy used by the principal, others involved in the process may include academic department heads, teachers, classified staff, students, and perhaps a parent or

TABLE 2.1

Budget Heads

District

Superintendent
Business Administrator
Assistant Superintendent
Director of Personnel
Director of Special Education
Learning Enrichment/Student Services
Director of Technology
Director of Accounting
Director of Athletics
Director of Physical Plant
Director of Aquatics
Director of Transportation
Director of Student Activities
Director of Management Information
Director of Food Services
Director of Center for Applied Academics and Technologies

Director - Community Education
Director - Library Media Services
Director - Math, Science, Technology Teacher Resource Center

Elementary Schools

Principal - Panorama Village
Principal - Corl Street
Principal - Easterly Parkway
Principal - Fairmount Avenue
Principal - Ferguson Township
Principal - Houserville
Principal - Lemont
Principal - Park Forest
Principal - Radio Park
Principal - Boalsburg
Principal - Matternville

Middle Schools

Principal - Mt. Nittany
Principal - Park Forest

High Schools

Principal - High School North
Principal - High School South

Principal - Alternative Program

Source: State College Area School District, State College, PA

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community advisory committee. More broadly, districts can identify the type of involvement various persons or groups should have with each activity on the budget calendar. However, care should be taken that the budget calendar not become cluttered with too much information.

5. *Construct the calendar.* The final step is to put together the pieces that have now been assembled. The first task is to put the fixed dates on the calendar—those thought to be inflexible. Next, take the date of the last event (e.g., June 15 - school board adoption of the budget) and place it on the calendar. Now, select a series of activities that must be accomplished immediately prior to the final event and begin working backwards to place them in the calendar. To establish the start and completion dates for each activity in the series, use known dates directly or use the estimated time needed to accomplish each activity combined with either the starting or ending date. Follow this same procedure for each series of activities. When all activities are entered, the district will have a rough first draft of the budget calendar.

TABLE 2.2

General Budget Calendar for a School Year

Month	Activity	Responsibility
August	Initiate gathering student, personnel, program, cost, facility, and economic data.	Business Administrator
September	Orientation & planning meeting(s) with school board and other groups directly involved with budget process (e.g. strategic planning committee)	Superintendent, Business Administrator
	Input sessions for district patrons	Superintendent
	Develop proposed budget calendar	Superintendent, Business Administrator
October	Approve budget calendar	School Board
	Review financial position with board	Business Administrator
	Develop cost and program guidelines and funding priorities for upcoming budget and present to school board	Superintendent, Business Administrator
	Plan and initiate collective bargaining negotiations, if necessary	Superintendent, Personnel Office
November	Develop enrollment projections for upcoming school year	Business Administrator
	Approve cost and program guidelines and funding priorities for budget year	School Board
	Develop and distribute budget preparation materials to budget heads	Business Administrator
December	Conduct training sessions or workshops for budget heads and clerical staff involved in budget preparation	Business Administrator
January	Prepare expenditure requests for operating and capital budgets	Budget Heads
	Develop preliminary revenue estimates by source of revenue	Business Administrator
February	Submit expenditure requests	Budget Heads
	Consolidate expenditure requests into overall district totals	Business Administrator
	Project staffing, salary, and benefits costs	Business Administrator Personnel Office
	Develop preliminary revenue estimates by source of revenue	Business Administrator

Developing the budget calendar is an iterative process. The first draft represents the district's initial estimate of when it would prefer things to occur and how long each activity is expected to take. The calendar is then examined for any unacceptable results—completion times beyond latest allowable date, overlaps of activities that must be completed sequentially, noncompliance with mandated deadlines, or insufficient time allotted to certain activities. Where possible, completion or start times are changed or the time allowed for activities is modified. The calendar adjusted until an acceptable solution is achieved.

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TABLE 2.2 *(continued)*

General Budget Calendar for a School Year

Month	Activity	Responsibility
March	Review of expenditure requests and estimated revenues	Superintendent, Business Administrator
	Discuss expenditure requests and adjust as necessary to balance with available revenues	Budget Heads
April	Prepare budget document, and appropriate supplementary information	Superintendent, Business Administrator
	Present complete budget document to school board	Superintendent
	Review and hold public hearings on proposed budget for school district	School Board
	Make revisions in proposed budget as appropriate	School Board
May	Update revenue estimates as new information becomes available from the tax assessor, state legislature, state department of education, and federal government agencies	Business Administrator
	School district holds budget election, if necessary.	School Board
	Discuss and review adjusted budget	School Board
June	Adopt the budget for the upcoming school year, make the appropriations of monies for the school district by major fund and budget category, and declare and certify the property tax levy required to balance the budget.	School Board
July	Close out accounts for year completed, enter appropriations for new year into books of account, open new accounts for new year	Business Administrator
August	Distribution of approved budget amounts for each cost center to budget heads	Business Administrator

One school district's general budget calendar for a year is illustrated in Table 2.2. In this sample calendar, the preliminary steps, such as gathering data, developing guidelines, determining enrollment projections, and preparing budgeting materials for schools and district offices are scheduled during the early part of the school year. These are followed by the development of the budget requests in January and submission to the business office for consolidation in February. February and March are devoted to preparing the proposed budget document, which is presented to the school board in April. This allows the board time to review the overall district budget, receive the latest revenue estimates, conduct budget elections if necessary, adopt the budget, appropriate funds, and levy the property taxes to support the budget by the beginning of the new school year.

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Conclusions

One final point to remember about budget calendars is that they are management tools. They should be useful and improve both the efficiency and effectiveness of a school district's operation. They should not get in the way or act as a straitjacket for administrators. If the original calendar is not working—deadlines are being missed, selection of activities is not helpful, interrelated activities are not adequately coordinated—then either the calendar should be changed to reflect the actual circumstances more accurately or the budget process itself should be carefully reviewed for operating deficiencies and modified to provide better management direction and control.

Organization for Budgeting

Many people in the school district are involved in budgeting to some extent. To avoid an uncoordinated, ineffective, and potentially disruptive process, it is important to present a clear picture of who the participants are along with their roles and responsibilities. Some will be decision makers; others will provide information, advice, or expertise. Still others will evaluate and pass judgment on the final product. A well-understood organizational structure for budgeting communicates the proper roles for each person or group and, thus, avoids creating false expectations of power or influence, which can lead to hostile reactions.

Types of Budgeting Organizations

Like most aspects of the budgeting process, there are alternative choices for organizational structures. They range in a continuum from a process centralized in the district office to a decentralized process where key decisions are made at the school or even instructional department level. The choice of organizational structure depends on many things: the management behavior and preferences of district administrators, particularly the superintendent; the relationship between the superintendent and the school board; the relationship between the school district and the community; the financial capability of mid-level district administrators; and the history of the district. This section will discuss three types of budgeting organizations that represent alternative choices along the continuum. Actual district budgeting organizations reflect variations on these three representative structures.

Highly centralized. Here, the district office controls and directs most budgeting activities. All important decisions are made at the district level, usually by the superintendent and a relatively few other key administrators. These decisions are then turned into instructions for others in the district to carry out. This is a top-down approach with little opportunity for involvement in decision making by others. Schools and departments are given specific, and often uniform, dollar amounts for each budget category (e.g., textbooks, instructional supplies) and are

required to report how the monies are spent. Permission from the district office is required to transfer funds from one budget account to another to meet particular instructional needs (e.g., from library books into periodicals). Schools of the same grade level within a district tend to be treated the same (i.e., receive the same per pupil allocation amount for supplies regardless of the types of students or age of building). The individual schools have limited recourse for additional funds to meet special needs. Equipment and other capital outlay requests, such as building improvements, are often sent by the schools to the district office to compete with similar requests district-wide for a limited pool of funds designated for those purposes. Even though individual school capital outlay requests may be prioritized, choices among schools and specific items are made at the district level. Frequently, centralized budgeting authority coincides with centralization of other key decisions, such as curriculum, personnel selection and hiring, and evaluation.[11]

Management teams. This organizational arrangement represents an intermediate structure between centralization and decentralization. The composition of the team can vary to reflect narrow or broad participation. At a minimum, the management team would consist of senior central office administrators, district-wide functional department heads, and elementary, middle, and high school principals. An expanded team would include representatives of other key groups in the district, such as teachers and classified staff. The role of the team members is to participate in and make key budget decisions. This procedure provides a wider range of inputs, although it can still be dominated by central office administrators.

School Site Budgeting

School site budgeting is the financial component of the more general decentralized management process known as site-based management (SBM). This new organizational approach is designed as a strategy for systemic education reform to improve school performance "in which teams of individuals actually providing services are given decision making authority and held accountable for results."[12] As a result, SBM changes the traditional authority and accountability structure found in school districts by:

1. Restructuring site/district relationships to provide more power, authority, and accountability to the school site.
2. Establishing conditions to restructure school and classroom organization.
3. Allowing school faculties to reallocate money currently in the system and to target new resources into productive uses as defined at that site.[13]

11. For a description of an actual school district using this process, see William Hartman, "Resource Allocation in High School," in William Hartman and William Boyd, eds. *Resource Allocation and Productivity in Education* (Westport, CT: Greenwood Press, 1988).

12. Allan Odden, Pricilla Wohlstetter, and Eleanor Odden, "Key Issues in Site-Based Management," *School Business Affairs* vol. 61, no. 5 (May 1995), p. 5.

13. Wood et al., *Principles of School Business Management*, pp. 23-2 to 23-3.

Under SBM, many of the basic educational decisions, such as staffing patterns, curriculum, and personnel selection, are made at the individual school level. Concurrently, with school site budgeting "instructional supplies, materials, equipment, texts, and library books are frequently budgeted at the building level. Some decentralized systems also provide individual building personnel budgets for teachers, aides, and custodians."[14]

However, not all district funds or resources are assigned to the school level. "Most school districts that have moved to building budgeting have retained centralized and district-level budgeting for capital outlay, maintenance, administration, and other funds and accounts that are district-wide rather than individual school building functions."[15]

The means of providing the resources to individual schools to allow them to participate in the school site budgeting process is through allocations from the district office. The allocations generally come in two different forms depending upon the type of resource. They are staff allotments and lump-sum dollar amounts.[16] For personnel, allotments can be numbers of staff by position or a dollar amount for staff based on standard costs of various positions. If schools can make trade-offs among different types of allotted positions (e.g., three aides for one teacher), then the two approaches function comparably. It is common to provide lump-sum amounts to schools for non-personnel expenditures. The advantages of lump-sum budgeting for all funds sent to the school level are:

- Quicker expenditure decisions.
- More effective use of resources.
- Clearer picture of how funds are spent in the school.
- Greater accountability for expenditures.
- Reduced unnecessary end-of-year spenddown of funds if carry-over of funds are permitted
- Greater ability to focus funds on instruction.
- Quicker delivery of services from internal and external suppliers.
- Improved choice of goods and services.
- Reduced waste with greater ownership of budget.
- Clearer information on prices and more competitive prices.[17]

In general terms, the school site budgeting process contains five elements involving both district and school budgetary decisions.

14. Hack *et al, School Business Administration*, p. 123.

15. *Ibid.*

16. Hack *et al, School Business Administration*, pp. 125-129.

17. Richard G. Neal, "School-Based management: The Advantages of Lump-Sum Budgeting," *School Business Affairs* vol. 60, no. 6 (June 1994), pp. 34-38.

1. Establishing an overall district budget target. (district decision)
2. Establishing basic (nonschool site) costs. (district decision)
3. Assigning all remaining funds to individual schools on a per capita basis. (district function)
4. Developing individual school expenditure plans. (school decisions)
5. Assembling individual school expenditure plans into a comprehensive district budget in accordance with overall budgetary limits. (district function)[18]

Within this framework, overall spending and revenue plans are coordinated by the central office to keep the district's total expenditures within available revenues. Personnel policies are also established and monitored centrally to maintain general uniformity and compliance with negotiated employee agreements and state and federal statutes. Based on the overall district budget limit, each school is notified of its total allotments for personnel and other expenditures. Under the site-based budgeting approach, the allotments are provided to the schools in an unrestricted fashion and decisions on how to allocate resources are made at the school level.[19]

There are numerous ways to organize a school site budgeting process. They vary in the types of educational and resource allocation decisions made at the site level and in the extent of participation and authority given to teachers and parents in the budgeting process. At a minimum, the major budgetary decision-making authority for school-level expenditures is shifted down the educational hierarchy from the central office administrators to the school principal. The principal, with or without the involvement of the school staff, has the responsibility for making the budget allocation decisions.

Once a district has decided upon a SBM approach, there are a number of questions that must be answered to clarify the process itself, the authority and responsibilities of those involved at the school and district levels, and the implementation process. Failure to resolve these early in the process can lead to contradictory expectations, miscommunication, organizational conflict, and unsuccessful results.

1. What budget functions and objects will be allocated to the school sites?
2. Who, how, and what process will be used to make decisions at the site level, the district level, and jointly?
3. What personnel, staffing, curriculum, facility, educational program decisions, and others will be made at the site, central office, and jointly?
4. What staff and administrator development programs will be conducted to train participants in budgeting, participatory decision making, accounting

18. John Greenhalgh, *School Site Budgeting: Decentralize School Management* (Lanham, MD: University Press of America, 1984).

19. For additional discussion on site-based management and budgeting, see Hack *et al*, *School Business Administration*, pp. 122-134; Wood et al., *Principles of School Business Management*, Chapter 23; and Association of School Business Officials, International, *School-Based Management and the School Business Administrator*, (Reston, VA: Author, 1993).

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for site funds, the legal implications of decision-making, state and local policies that affect decisions, collective bargaining impact, etc.?

5. What and how will resources be distributed to school sites? How will formulas be determined and what variables will be used?
6. What resources will be needed during the implementation to pay for new equipment, computer programs, workshops, training sessions, etc.?
7. What will be the timeline for implementation? Will site-based management/budgeting be implemented in phases or all at once? Will only selected sites be used to pilot the system? If so, which sites will be used and how will the phase-in process be implemented?[20]

Another more advanced proposal involves establishing and using school site councils in the school management and resource allocation process. When school site councils are created, three general issues need to be resolved.

1. *Membership.* Who is to be on the council (e.g., principal, teachers, parents, and non-parent residents), in what proportion, and how are they selected (e.g., elections, appointment)?
2. *Authority.* What is the role of the council (e.g., fund-raiser, cheerleader for school, involvement in educational program) and what issues can the council consider (e.g., student assessment, pedagogy, curriculum, instructional materials, hiring, staff assignments, discipline, and resource allocation)?
3. *Decision Making.* Where is the formal decision-making authority located, and who has the final say on decisions (e.g., principal with the council in an advisory role, or the council with the role of the principal to carry our their decisions)?[21]

In the most radical approach, each school would have a school site council that would function as a mini school board for the site and have responsibility for hiring and evaluating the principal, assisting in designing the educational programs, and approving the budget for the school. The principal would serve as the site educational manager hiring other personnel, developing the budget for the school, and negotiating the school's curriculum with the teaching staff and the school site council. Comprehensive decision making would be pushed down to the school level and involve both school personnel and community members. The best known and most extensive implementation of this approach is in the Chicago Public Schools.[22]

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20. Lloyd E. Frohreich, "What Have We Learned? A Look at the SBM Literature." *School Business Administration* vol. 61, no. 5 (May 1995), p. 25.

21. Wood et al., *Principles of School Business Management*, pp. 23-13 to 23-16.

22. G. Alfred Hess, *Restructuring Urban Schools: A Chicago Perspective.* ((New York: Teachers College Press, 1995).

Choosing an Organization for Budgeting

In considering an appropriate organizational structure for the budgeting process both organizational and fiscal issues need to be resolved. In addition, it is important to remember that the budgeting process is only part of the district's operations and its organization should be consistent with the rest of the district's structure. An attempt to impose a centralized budgeting process on top of a decentralized instructional decision-making process will lead to serious organizational conflicts. Curricular decisions have direct fiscal implications. For example, if an individual school with instructional decision-making authority decided to implement a computer-assisted instruction approach throughout the school, but the central office administration denied funds to purchase the necessary equipment and software, there would be an critical conflict. The planning, curriculum, and fiscal organizational arrangements in a district, or in a school for that matter, must mesh smoothly to ensure coordinated and effective results.

Organizational issues. Key elements in selecting a particular organizational structure for budgeting are the management style, abilities, and preferences of the superintendent and other key administrators. As the person ultimately responsible for the educational and fiscal outcomes of the school district, the superintendent must function comfortably within the organizational structure of the district. A superintendent who wishes to be fully knowledgeable about every detail of the budget and to control the process closely will need a centralized budgeting organization structure to accomplish these objectives. Conversely, a superintendent who feels comfortable in delegating responsibilities to subordinates and only monitoring the outcomes can work easily in a decentralized structure. Evauluating fiscal performance for the superintendent and other administrators is tied in with the choice of organizational structure. Persons can only be held responsible in areas they have decision-making authority. A centralized structure limits authority and, consequently, limits the accountability of middle-level administrators to following budgetary instructions. On the other hand, a decentralized structure brings more people into the process in a meaningful way and can broaden the scope of evaluation for those involved to include their fiscal activities.

The role played by the school board will also influence the budgeting organization. A policy-oriented board—one that establishes district policies and relies on district administrators to carry them out—will function well within a decentralized structure and rely on monitoring the activities of district personnel to stay informed and in control of district operations. However, an administrative-oriented board—one that gets involved in administrative decisions and operations—is likely to want a more centralized structure where they have greater direct control.

The type of budgeting process the district has used in the past is another important consideration. Based on past experiences, both school district personnel

and community members have expectations of the role that they will play and the type of involvement that they will have. Significant changes from past procedures should be preceded by a strong effort to communicate the nature and reasons for the changes to all of those involved. Otherwise, the clash between expectations and actual involvement may cause conflict in the budgeting process.

Fiscal issues. The fiscal health of a school district may also have an influence on the appropriate organizational structure for budgeting. Districts under financial pressures may control expenditure plans closely through a centralized structure. Budgets prepared following tight guidelines issued by the central office can limit certain expenditures (e.g., a 10 percent reduction in the total dollars available to each school for supplies, or no capital outlay requests) and reduce the time and effort needed to cut back expenditure requests to feasible levels for the upcoming year.

Another consideration is the cost savings possible through standardization of purchases in a more centralized system, which can lead to volume discounts and other purchasing efficiencies. The drawback to this approach is the potential loss of flexibility for individual schools and departments to operate their desired instructional program. This is an area where curricular considerations need to be taken into account along with fiscal ones.

Key budget organization decisions. The choice of the appropriate organizational structure for the budgeting process rests upon a number of important decisions concerning who has responsibility for the decision and at what level in the district organizational structure the decision is made. Questions illustrating these decisions are listed below. If the answers to the questions tend to be central office oriented, then a centralized budgeting organization structure would be appropriate. However, if it is desired to push some of the decision-making responsibility down to other levels, then a more decentralized approach is necessary. Joint determination of important budgetary decisions reflects the need for an intermediate type of structure.

1. Who has responsibility for establishing the overall dollar amount expenditures?
2. Who has responsibility for establishing the expenditure amounts for each major program or organizational unit?
3. Who has responsibility for the selection of specific resources within the allotted dollar amounts for each program?
4. Who has responsibility for curriculum selection? Does the district prescribe the curriculum and instructional materials at each school or do individual schools or teachers make those decisions?
5. Who has responsibility for the initiation of new instructional programs and/or the elimination of existing ones?
6. Who has responsibility for establishing salaries and employee benefit amounts for various employee groups?

7. Who is responsible for hiring personnel?
8. Who decides which items and amounts are to be cut if budget reductions are required?
9. Who establishes the capital expenditure budget amount and who decides on how it is allocated?

One final point of importance is the difference between recommendations and approval in the budget process. In many instances, budget decisions are influenced by several persons or groups, although the final decision may be made by an individual. A school-site council in an advisory role—even if only recommending actions to be followed by school administrators—clearly influences many of the budgetary decisions, such as personnel mix, expenditure allocations for various programs and objects, salary levels, curriculum selections, and program adoption or elimination. However, the specific decisions for many of these aspects may actually be made by district or school level administrators. So in reviewing the questions above, keep in mind both the decision maker and those who should be contributing to the decisions as well.

Conclusions

The purpose of this section has been to describe alternative budgeting organizations. They range from a highly centralized structure dominated by central office administrators to a highly decentralized structure where central office administrators set general fiscal and programmatic parameters within which school-level administrators, or even school site councils, have autonomy. In either case—or in the instances between these two poles—the link between district office and schools is critical. Although the roles and responsibilities of all persons and groups involved will depend on the type of organization and process used, they must be clearly identified and communicated so that all concerned understand what is expected and what part they will play in the budgeting process. This is best done by matching the management styles of the top district administrators, the expectations of the school district personnel and community, and the financial conditions facing the district with the appropriate organizational structure for district budgeting.

Problems

2.1 What type of budgeting approach is used by your school district? Is it appropriate for planning and managing the district's operations? What would be the advantages and disadvantages of changing to another type of budgeting approach?

2.2 Obtain a copy of the budget calendar for your district. Identify the activities and critical dates for:

a.) principals
b.) business manager
c.) superintendent
d.) school board.

How could the budget calendar be improved in both content and format?

2.3 What type of organization is used by your school district for budgeting? Where are the key decisions made? What authority/responsibility do the principals have for:

a.) determining the level of personnel and non-personnel resources available to their schools;
b.) determining how the available resources will be allocated or spent within the school?

2.4 Assume that you have been assigned the task of advising the school board in your district of the appropriateness of school site budgeting. What arguments would you make for school site budgeting in the district? What arguments would you expect against this organizational arrangement and by whom? If the board decided in favor of site based budgeting, what implementation issues would you expect to arise?

Notes

3 Accounting: The Language of Budgeting

Introduction

To manage the fiscal aspects of a school district properly, administrators must understand the accounting system used in schools. Administrators frequently are required to take actions and make decisions with important financial implications. Further, many of these decisions are based on financial data. Nowhere is this more true than in the budgeting process. As the chapter title states, *accounting is the language of budgeting.* The central relationship between budgeting and accounting was recognized by the Governmental Accounting Standards Board (GASB) as one of the fundamental principles of accounting and reporting for state and local governments, including school districts.

> *Budgeting, Budgetary Control, and Budgetary Reporting*
>
> *a. An annual budget(s) should be adopted by every government unit.*
>
> *b. The accounting system should provide the basis for appropriate budgetary control.*[1]

For school administrators, board members, and the public to make informed judgments about the budget amounts and the allocations proposed for the various instructional and support programs, they must have the relevant financial information in a usable format. The school accounting system provides a structure for organizing and using the massive amounts of budgetary and other fiscal data present in a school district. Expenditure estimates for the educational programs must be aggregated and presented in an understandable and consistent form. Projections of revenues for the coming year must also be organized for management decisions. Without a coherent framework for dealing with financial information, administrators and others would be rapidly overwhelmed by the magnitude of financial data present in the school district.

The accounting system provides the means for tracking all-important financial transactions in the school district. Through it, all fiscal data are identified, organized, and explained. *Additionally, the school accounting system is the organizing structure around which the budget is developed.* During the operating year, the accounting system provides information for administrators to manage their programs in a fiscally responsible manner. In sum, the accounting system controls the manner in which the district's financial information is developed, maintained, and presented.

1. Governmental Accounting Standards Board, Codification of Governmental Accounting and Financial Reporting Standards, 3rd ed. (Norwalk, CT: GASB, 1990), para. 100.109.

It tells a) where the funds come from to support the district's operation, b) how these dollars are to be spent, and c) what the district's financial condition is. Consequently, it has a powerful, central role in school district budgeting.

The accounting system is not independent of the school district operations. There is a close relationship between the organizational structure and the accounting structure. In most government organizations the "management control system is *built around a financial structure.*"[2] A school accounting system, based on a function-object budget format and combined with specification of the operational unit, is designed to match administrative responsibility within the district organization. Through the various dimensions of the accounting system, particularly the expenditure accounts, fiscal information is collected and presented about individual organizational units such as school buildings, instructional departments within schools, administrative units, and support units. As a result, the accounting system has a strong influence on financial information available to school administrators and on their program operations.

Accounting for School Systems

Definitions

A general definition of accounting is:

The system of classifying, recording, and summarizing financial transactions and analyzing, verifying, and reporting the results.[3]

A second and similar explanation defines an accounting system as:

The total structure of records and procedures that discover, record, classify and report information of the financial position, operations, changes in fund equities and changes in financial position of the school district or any of its funds, account groups, and organizational components.[4]

A parallel definition for *school accounting* is, that the:

accounting system is the means by which financial data are captured during actual operation of the LEA, recorded in the books of account, and then analyzed to produce the various kinds of reports needed.[5]

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2. Robert N. Anthony and Regina Herslinger, *Management Control in Nonprofit Organizations* (Home- wood, IL: Richard D. Irwin, Inc., 1975), p. 18. (Italics in original.)

3. *Webster's New Collegiate Dictionary* (Springfield, MA: G. & C. Merriam Company, 1974), p. 8.

4. R. E. Everett, Raymond Lows, and Donald Johnson, *Financial and Managerial Accounting for School Administrators*, (Reston, VA: Association of School Business Administrators, International, 1996), Glossary, p. 3.

5. William J. Fowler, *Financial Accounting for Local and State School Systems 1990* (Washington, DC: National Center for Educational Statistics, 1990), p. 9.

From these definitions several key points emerge to characterize an accounting system:

- Collection of financial data.
- Organization of these data according to a standard classification system.
- Aggregation of similar individual transactions to yield manageable information.
- Review and analysis of the results.
- Regular reporting of the financial results.

Another important point is that the accounting system records are kept in terms of money. The dollar amounts of the transactions are recorded in the ledgers and books of accounts along with some description to identify the transactions. As described above, the complete accounting system consists not only of the books recording the transactions, but also the supporting documents and papers, the reports generated, and the standard procedures for operating and maintaining the accounts.

Objectives

A school accounting system must serve many users with diverse needs and expectations. The primary groups that have interest in the accounting system—or, more accurately, in the information provided by it—are school administrators and other employees, school boards and other governing bodies, special interest groups (e.g., teacher associations and advocacy organizations for handicapped children), state and federal legislatures, school district creditors, and the general public—particularly district parents and voters.[6]

To meet the needs of the many potential users requires a complete and informative accounting system. As a measure of comprehensiveness, Tidwell lists seven objectives for financial accounting for school systems.

1. To provide a complete record of all financial transactions of the school system.
2. To summarize, with reasonable promptness, financial transactions of the school system in financial reports required for proper, effective, and efficient administration.
3. To provide financial information that would be helpful for budget preparation, adoption, and execution.
4. To provide financial controls or safeguards for the school system's money and property.
5. To provide a basis for the governing board to place administrative responsibility and minimize the possibility of waste, carelessness, inefficiency, and possible fraud.

6. Ibid., pp. 7-8.

6. To provide clear and concise financial reports to the public as a basis for judging past, present, and future financial operation of the school system.
7. To provide a historical record which, over a period of years, can be studied and analyzed critically and constructively for the purpose of aiding citizens, the governing board, and the school system's administrative officers in keeping pace with the changing concepts of education.[7]

Fund Accounting[8]

Governmental accounting, including accounting for school systems, uses an approach known as *fund accounting*. The GASB specifies that "governmental accounting systems should be organized and operated on a fund basis."[9]

A fund is defined as an independent fiscal and accounting entity with a self-balancing set of accounts. These accounts record all assets and financial resources together with all related liabilities, encumbrances (or commitments), reserves, and equities, which are segregated for the purpose of carrying on specific activities or attaining certain objectives in accord with special regulations, restrictions, or limitations. Every school system should establish and maintain those funds required by law and sound administration.[10]

This approach permits school districts to create and utilize several different types of funds. However, as a rule, the number of funds should be the least number possible for the district's operation. "Only the minimum number of funds consistent with legal and operating requirements should be established, however, because unnecessary funds result in inflexibility, undue complexity, and inefficient financial administration."[11]

Types of Funds

The most common funds and those recommended by the Governmental Accounting Standards Board, the National Center for Education Statistics, and the Association of School Business Officials can be grouped into four major classifications with separate fund types in each. The classification scheme is shown in Table 3.1 and discussed as follows.

Governmental Funds. Most school district functions are financed through governmental funds. Most of the operations of the district and its programs are recorded in these funds.

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7. Sam B. Tidwell, *Financial and Managerial Accounting for Elementary and Secondary School Systems* (Reston, VA: The Research Corporation, Association of School Business Officials, 1985), p. 8.

8. This section is based on Fowler, *Financial Accounting for School Systems 1990*, pp. 17, 77-78; Tidwell, *Financial and Managerial Accounting*, Chapter 2; and Everett, Lows, and Johnson, *Financial and Managerial Accounting*, Chapters 2, 12-20.

9. GASB, *Codification*, para. 100.102.

10. Tidwell, *Financial and Managerial Accounting*, p. 18.

11. GASB, *Codification*, para. 100.104.

TABLE 3.1

Fund Classifications

Classification	Code	Type
Governmental Funds	1	General Fund
	2	Special Revenue Funds
	3	Capital Projects Funds
	4	Debt Service Funds
Proprietary Funds	5	Enterprise Funds
	6	Internal Service Funds
Fiduciary Funds	7	Trust and Agency Funds
Account Groups	8	General Fixed Assets
	9	General Long-term Debt

Source: William J. Fowler, Financial Accounting for Local and State School Systems 1990 (Washington, DC: National Center for Educational Statistics, 1990), pp. 17.

1. *General Fund.* The General Fund is the most common fund and is utilized by every school district. It is used to account for all financial resources except those required to be accounted for in another fund.
2. *Special Revenue Funds.* These funds are used to account for the proceeds of special sources of revenue that are restricted to expenditures for specified educational purposes. An example would be revenues received from the federal government for the education of handicapped children. Special revenue funds maintain separate financial records to document the proper expenditure of restricted-use funds. A district may have more than one special revenue fund.
3. *Capital Projects Funds.* These funds account for the financial resources involved in acquiring or constructing major capital facilities in the school district. The revenues received for capital construction (e.g., monies from the sale of bonds or from grants from state or federal government agencies) are recorded in the capital project fund along with expenditures for purchasing or building capital facilities (e.g., land, buildings, or equipment). A separate fund may be used for each capital project in the district to maintain the financial integrity of the different projects.

4. *Debt Service Funds.* These funds are used to accumulate money to repay the school district's long-term debt. Long-term debt is generally in the form of bonds that have been sold to finance large-scale capital expenditures. The resources in debt service funds are used to pay principal and interest amounts. Creating a debt service fund is often required as a condition of selling bonds. It can obligate the school district to establish a systematic and regular schedule of payments into the fund so there is sufficient money available when the interest payments and bond repayments are due. In this manner, the bondholders are protected and the school district provides for the repayment in an orderly and fiscally nondisruptive fashion. A separate debt service fund for each bond issue allows the district to control and document the proper accumulation of monies to repay their long-term obligations.

Proprietary Funds. A limited number of district activities are more similar to private enterprise operations than those typical of the public sector. These are activities financed, at least in part, through charges for service. To account for these activities and to keep their financial records separate from regular school district operations, various proprietary funds are used.

5. *Enterprise Funds.* These funds are used to account for businesslike operations of the school district in which direct services are provided to customers. Customers—either inside or outside the school system—are charged for these services and the resulting revenues are used to help pay for the costs of the operation. Common examples include food service programs, interscholastic athletics, school newspaper or yearbook, bookstore operation, and transportation program.
6. *Internal Service Funds.* As the name suggests, these funds are used to account for the operation of district functions providing goods or services to other district programs, other school districts, or other governmental agencies on a cost reimbursement basis. To develop cost information, separate funds are established to collect, record, and document the costs of the internal service functions. Examples include central warehousing and purchasing, central data processing, and central printing operations.

Fiduciary Funds. In some instances, the school district holds certain assets as a trustee or an agent. That is, the assets (or proceeds from the assets) may be administered by the district under certain legal restraints. To account for its responsibilities for these assets, fiduciary funds are established to record both the acquisition of the assets and their disposition.

7. *Trust and Agency Funds. Trust* funds are created to account for resources (property, money, income) for which the district has accepted the

responsibility to act as trustee. The district administers the fund and, depending on the conditions of the trusteeship, can expend the principal amount, the income derived from the principal, or some combination of the two.

Agency funds are established when the district acts as an agent to hold resources for another group and to disperse them as instructed. Examples of agency funds include funds for teacher organizations, parent organizations associated with the school, and student body monies.

Account Groups. These are groups of accounts established to maintain the records for the district's general fixed assets and general long-term liabilities. Separate account groups are used to record and control the long-term assets and liabilities of the district. This is particularly helpful for budgeting because the accounting transactions for current operations (expenditures and revenues planned for the coming year) are kept separate from the long-term accounts. The only exceptions to the use of the account groups are proprietary and trust funds in which the long-term assets and liabilities are accounted for in those funds directly.

8. *General Fixed Assets.* This set of accounts is used to maintain records on the purchase cost of all property, plant, and equipment, except for those recorded in the proprietary and fiduciary funds. The general fixed assets could include land and improvements, buildings and building improvements, equipment, and machinery.
9. *General Long-Term Debt.* This set of accounts is used to maintain records of the long-term liabilities of the school district, except for those recorded in the proprietary and fiduciary funds. The types of liabilities included in the accounts are general obligation bonds, capitalized lease obligations, legal judgments, special assessments payable to other governmental units, unfunded pension liabilities, and notes and warrants that are not due within one year.

Each of the funds has a code number. The codes are used in classifying the financial transactions by the fund in which they belong. For example, all of the expenditure accounts in the General Fund will have a fund code number of 1 (or 10 or 100 depending on the specific state chart of accounts), while expenditure accounts in a special revenue fund will have the code number 2 (or 20 or 200), and so forth. If there is more than one fund of a given type, the coding system will require separate numbers for the different funds (e.g., 31 and 32 for two different capital project funds used to record separate building projects). As we will see in later sections of this chapter, each financial transaction in the district will have several code numbers assigned to identify it according to the proper fund, year, and type of account.

Expenditures

Expenditures are the costs of doing business of a school district. They are defined as:

> *The cost of goods delivered or services rendered, whether paid or unpaid, including expenses, provisions for debt retirement not reported as a liability of the fund from which it was retired, and capital outlays.*[12]

Budgeting consists of planning the expenditures the district expects to make along with the revenues it anticipates receiving during the upcoming school year. Since revenue projections are usually done in the district office, expenditures are the single most important type of account that involves most administrators. Consequently, there is a need for all school administrators to become well acquainted with the conceptual structure and the specific accounts and codes used in classifying expenditures. The accounting structure for expenditures serves as a fiscal language and as the primary means of communicating financial information about the district's operations. Administrators must be fluent in this language.

Need for Expenditure Classification System

The primary purpose of the expenditure accounting system is to provide information that assists the operation of the school district. The system must be able to record initial expenditure data so that they can be aggregated and reported in useful forms. This means categorizing each expenditure according to future reporting requirements. The expenditure accounting system provides accountability for proper spending, allows managerial control to prevent excessive spending, and fits with the district's organizational structure.

The accounting system used to classify and record expenditures is the most complex of any of the financial accounts. Funds only have a single dimension-the type; revenues, as we will see shortly, have two dimensions. Systems for classifying expenditures, however, generally use at least four separate dimensions, and up to 10 dimensions are available if desired by the school district.

The reason for the multitude of expenditure categories is that expenditure information serves many purposes and is used by many groups with different perspectives. Principals need to be informed of the authorized expenditure levels for their schools and know how much money they have to spend in various accounts at any given time. District administrators, on the other hand, need to have expenditure data to monitor individual programs or schools as well as summarized data to monitor the entire district's operations. The school board needs fiscal information for policy decisions, but would be overwhelmed by detailed records. Special interest groups want to have expenditure information about programs that

12. Everett, Lows, and Johnson, *Financial and Managerial Accounting*, Glossary, p. 24.

involve them. A multi-dimensional expenditure classification system allows expenditure data to be identified and recorded at the lowest level of detail appropriate, and then combined and recombined to produce the expenditure summary information required by different groups.

Expenditure Classifications

To provide both flexibility and comparability in reporting educational expenditures, the National Center for Educational Statistics (NCES) has issued a series of publications, the most recent of which is *Financial Accounting for Local and State School Systems 1990*. This document serves as a national standard for reporting financial data for state and local education agencies. Every state has its own individual state accounting manual with specific regulations and guidelines for expenditure classification, but most are based on or are similar to the NCES model. The *Financial Accounting for Local and State School Systems 1990* codes will be used throughout this book for consistency, but in actual practice administrators should use the accounting system and associated codes in their own state's school accounting manual. State specific definitions of all account dimensions are generally given in these documents.

The expenditure classification system uses a variety of dimensions to identify each expenditure transaction along multiple categories. *Financial Accounting 1990* uses 10 separate dimensions to classify expenditures. They are divided into two groups: 1) dimensions essential for reporting expenditures at the federal level, and 2) optional dimensions available to school districts. The essential dimensions are Fund, Program, Function, Object, and Project/Reporting (previously called Source of Funds). The optional dimensions are Level of Instruction, Operational Unit, Subject Matter, Job Classification, and Special Cost Center.[13]

To classify an expenditure, it is necessary to identify its category for every dimension used in the state's expenditure accounting system. As a result, each expenditure has a separate classification for every dimension. A coding system is used to systematize the classification process and keep the various classifications of each transaction distinct. Each dimension has its own account codes, which identify the different categories into which it is divided. Consequently, each expenditure is recorded with a series of code numbers to identify all of the relevant classification information.

For later reporting, all expenditures with the same account codes can be summed to arrive at the total amount for a particular type of expenditure. For example, all expenditures for Edison Elementary School would have a particular code number assigned to them representing the Operational Unit. To report all of the expenditures for this school, those items with the code for Edison School as the Operational Unit would be summed—a relatively easy task using a computerized system. To satisfy another information need, such as the costs of administration in all schools in the

13. Fowler, *Financial Accounting School Systems 1990*, p. 9.

district, all expenditures with the code for school-level administration in the Function dimension would be aggregated. Note that this would include the administrative expenditures for Edison School along with those of the other schools in the district. With an accounting system that identifies expenditures along multiple dimensions, the principal's salary can be correctly included in cost reports for both the cost of the school and for the cost of school administration, as the occasion warrants.

Fund. Fund accounting has been discussed above. For expenditure classification, it is necessary to identify the fund in which each expenditure belongs. Table 3.1 lists the funds and their code numbers.

Function. The function represents the purpose of the expenditure. It is the reason or objective or the *why* of the expenditure.

> *The function describes the activity being performed for which a service or material object is acquired.*[14]

In this accounting system, the financial activities of school districts are divided into five major functions: Instruction, Support Services, Operation of Non-Instructional Services, Facilities Acquisition and Construction Services, and Other Uses. Each of these functions is further subdivided into one to three additional levels representing greater specificity and detail of expenditure classification. The second level is termed Subfunction; the third level is Service Areas; and the fourth is Areas of Responsibility. Table 3.2 provides a listing of the expenditure functions and codes.

The two most important functions for a school system are Instruction and Support Services. Instruction is defined as:

> *. . . activities dealing directly with the interaction between teachers and students. Teaching may be provided for students in a school classroom, in another location such as a home or hospital, and in other learning situations such as those involving co-curricular activities. It may also be provided through some other approved medium such as television, radio, telephone, and correspondence. The activities of aides or classroom assistants of any type (clerks, graders, teaching machines, etc.) that assist in the instructional process are included here as well.*[15]

Supporting Services, by contrast, provide:

> *. . . administrative, technical (such as guidance and health), and logistical support to facilitate and enhance instruction. These services exist as adjuncts for fulfilling the objectives of instruction, community services, and enterprise programs, rather than as entities within themselves.*[16]

14. Ibid., p. 26.

15. Ibid., p. 88a.

16. Ibid., p. 88.

The distinction is an important one and is maintained throughout the function structure. Only activities relating directly to student instruction are classified under the instruction function; all others are classified under other functional areas. For example, at the school building level, teachers, instructional aides, instructional supplies, and textbooks would all be coded as instructional expenditures, while the principal, school secretary, and other office expenditures would be recorded as school administration—a supporting service function. In this way, the costs of instruction can be kept separate and not combined irretrievably with other types of expenditures.

As Table 3.2 illustrates, the functions are nested—that is, the lowest levels of activity with similar operational objectives are grouped together under the next level heading, and the activities at this level are then grouped under the next highest level, and so forth. For example, Budgeting Services is one element of Fiscal Services, which itself is one of several Business Services. This in turn is part of the total Support Services.

The coding system associated with the function dimension structure helps to distinguish the various functions readily. All expenditures have a four-digit function code. The first digit represents the major function. The function code for all instructional expenditures begins with the number 1; the function code for all supporting services expenditures begins with the number 2, and so forth. The second digit indicates the subfunction the third digit specifies the service area; and the fourth digit (if used) identifies the area of responsibility. For example, a function code of 2512 represents Budgeting Services. The first digit (2000); the second digit (5) represents Support Services-Business (2500); the third digit (1), Fiscal Services (2510); and the fourth digit (2), Budgeting Services (2512).

Program. The program dimension is characterized as "a plan of activities and procedures designed to accomplish a predetermined objective or set of objectives."[17] All expenditures related to a specific program can be collected under this dimension without regard to the particular function to which they belong. This permits districts to determine the total costs of specific programs. For example, total costs of a vocational program can be identified through a Program classification of all related expenditures. This is not possible under the Function classification because instructional costs are recorded separately from supervision, administrative, and student transportation services and not identified with a specific program. Table 3.3 provides the program categories.

The program categories are largely related to instructional activities since the Instruction function has only a single code (1000) with no subfunctions to designate various areas of instruction. As a result, in some state accounting manuals, these two dimensions are combined so that the three-digit program codes are used as the second, third, and fourth digits in the Instruction function code.[18]

17. Ibid., p. 24.

18. Pennsylvania Department of Education, Manual of Accounting and Related Financial Procedures for Pennsylvania School Systems (Revised) (Harrisburg, PA: Pennsylvania Department of Education, 1992).

TABLE 3.2

Function Dimension of Expenditures

1000	**Instruction**
2000	**Support Services**
2100	Support Services-Students
2110	Attendance and Social Work Services
2111	Supervision of Attendance and Social Work Services
2112	Attendance
2113	Social Work
2114	Student Accounting
2119	Other Attendance and Social Work Services
2120	Guidance Services
2121	Supervision of Guidance Services
2122	Counseling
2123	Appraisal
2124	Information
2125	Record Maintenance
2126	Placement
2129	Other Guidance Services
2130	Health Services
2131	Supervision of Health Services
2132	Medical
2133	Dental
2134	Nursing
2139	Other Health Services
2140	Psychological Services
2141	Supervision of Psychological Services
2142	Psychological Testing
2143	Psychological Counseling
2144	Psychotherapy
2149	Other Psychological Services
2150	Speech Pathology and Audiology Services
2151	Supervision of Speech Pathology and Audiology Services
2152	Speech Pathology
2153	Audiology
2159	Other Speech Pathology and Audiology Services
2200	Support Services-Instructional Staff
2210	Improvement of Instruction Services
2211	Supervision of Improvement of Instruction Services
2212	Instruction and Curriculum Development
2213	Instructional Staff Training
2219	Other
2220	Educational Media Services
2221	Supervision of Educational Media Services
2222	School Library
2223	Audiovisual
2224	Educational Television
2225	Computer-Assisted Instruction
2229	Other Educational Media Services
2290	Other Support Services-Instructional Staff

(*continued*)

TABLE 3.2 *(continued)*

Function Dimension of Expenditures

2300	Support Services-General Administration
2310	Board of Education Services
2311	Supervision of Board of Education Services
2312	Board Secretary/Clerk
2313	Board Treasurer
2314	Election
2315	Tax Assessment and Collection
2316	Staff Relations and Negotiations
2319	Other Board of Education Services
2320	Executive Administration Services
2321	Office of the Superintendent
2322	Community Relations
2323	State and Federal Relations Services
2329	Other Executive Administration Services
2400	Support Services-School Administration
2410	Office of the Principal Services
2490	Other Support Service-School Administration
2500	Support Services-Business
2510	Fiscal Services
2511	Supervision of Fiscal Services
2512	Budgeting
2513	Receiving and Disbursing Funds
2514	Payroll
2515	Financial Accounting
2516	Internal Auditing
2517	Property Accounting
2519	Other Fiscal Services
2520	Purchasing Services
2530	Warehousing and Distributing Services
2540	Printing, Publishing, and Duplicating Services
2590	Other Support Services-Business
2600	Operation and Maintenance of Plant Services
2610	Operation of Buildings Services
2620	Care and Upkeep of Grounds Services
2630	Care and Upkeep of Equipment Services
2640	Vehicle Operation and Maintenance Services (Other than Student Transportation Vehicles)
2650	Security Services
2690	Other Operation and Maintenance of Plant Services
2700	Student Transportation Services
2710	Vehicle Operation
2720	Monitoring
2730	Vehicle Servicing and Maintenance
2790	Other Student Transportation Services

(continued)

TABLE 3.2 *(continued)*

Function Dimension of Expenditures

2830	Staff Services
2831	Supervision of Staff Services
2832	Recruitment and Placement
2833	Staff Accounting
2834	Inservice Training (for noninstructional staff)
2835	Health
2839	Other Staff Services
2840	Data Processing Services
2841	Supervision of Data Processing Services
2842	Systems Analysis
2843	Programming
2844	Operations
2849	Other Data Processing Services
2900	Other Support Services
3000	**Operation of Non-Instructional Services**
3100	Food Services Operations
3200	Other Enterprise Operations
3300	Community Services Operatiuons
4000	**Facilities Acquisition and Construction Services**
4100	Site Acquisition Services
4200	Site Improvement Services
4300	Architecture and Engineering Services
4400	Educational Specifications Development Services
4500	Buiilding Acquisition and Construction Services
4600	Building Improvement Services
4900	Other Facilities Acquisition and Construction Services
5000	**Other Uses (governmental funds only)**
5100	Debt Service
5200	Fund Transfers

Source: William J. Fowler, Financial Accounting for Local and State School Systems 1990, (Washington, DC: U.S. Government Printing Office, 1990), pp. 26-29.

TABLE 3.3

Program Dimension of Expenditures

100			**Regular Programs-Elementary/Secondary**
200			**Special Programs**
	210		Mentally Retarded
		211	Educable Mentally Retarded
		212	Trainable Mentally Retarded
	220		Physically Handicapped
		221	Hard of Hearing
		222	Deaf
		223	Deaf-Blind
		224	Visually Handicapped
		225	Speech Impaired
		226	Crippled
		227	Other Health Impaired
	230		Emotionally Disturbed
	240		Learning Disabled
	250		Culturally Deprived
	260		Bilingual
	270		Gifted and Talented
300			**Vocational Programs**
	310		Agriculture
	320		Distributive Education
	330		Health Occupations
	340		Home Economics
		341	Occupational
		342	Consumer and Homemaking
	350		Industrial Arts
	360		Office Occupations
	370		Technical Education
	380		Trades and Industrial Occupations
	390		Other Vocational Programs
400			**Other Instructional Programs-Elementary/Secondary**
	410		School-Sponsored Cocurricular Activities
	420		School-Sponsored Athletics
	490		Other
500			**Nonpublic School Programs**
600			**Adult/Continuing Education Programs**
700			**Community/Junior College Education Programs**
800			**Community Services Programs**
	810		Community Recreation
	820		Civic Services
	830		Public Library Services
	840		Custody and Child Care Services
	850		Welfare Activities
	890		Other Community Services
900			**Enterprise Programs**
	910		Food Services
	990		Other Enterprise Programs
000			**Undistributed Expenditures**

Source: William J. Fowler, Financial Accounting for Local and State School Systems 1990, (Washington, DC: U.S. Government Printing Office, 1990), pp. 24-26.

For example:

Code	Function	Subfunction
1100	Instruction	Regular Programs-Elem/Secondary
1200	Instruction	Special Programs-Elem/Secondary
1300	Instruction	Vocational Education Programs

Another combination of categories that is used in some state accounting systems involves connecting the Level of Operation dimension (e.g., elementary, middle, secondary) with the Instruction (Function) for Regular Programs-Elementary/ Secondary (Program) grouping. The result, shown below, uses a four-digit code to differentiate regular instruction among elementary, middle, and secondary school operations.

Code	Function	Subfunction	Level of Operations
1110	Instruction	Regular Programs	Elementary
1120	Instruction	Regular Programs	Middle
1130	Instruction	Regular Programs	Secondary

Object The object is the item for which the expenditure is made. If the function dimension describes the why of the expenditure, the object dimension specifies the *what*. It is defined formally as "the service or commodity obtained as the result of a specific expenditure."[19]

Objects are divided into nine major categories: Personal Services-Salaries, Personal Services-Employee Benefits, Purchased Professional and Technical Services, Purchased Property Services, Other Purchased Services, Supplies, Property, Other Objects, and Other Uses of Funds. Taken together, these categories cover all goods and services the school districts purchase. Each of the main categories has further subdivisions, which provide more specific classification of object expenditures. Table 3.4 provides a listing of the object categories. Specific state accounting systems are generally similar, although there may be variations in particular object categories and subcategories.

The object dimension also has its own coding system to identify the types of expenditures. It utilizes a three-digit code with the first digit representing the main category (e.g., 100 for Personal Services-Salaries, 200 for Personal Services-Employee Benefits). The second and third digits allow expenditures to be coded more precisely within the object main category.

Salaries. Amounts paid to both permanent and temporary (LEA Local Education Agency or school district) employees, including those substituting for permanent positions. This includes gross salary for personal services rendered while on the LEA payroll.[20]

19. Ibid., p. 30.

20. Ibid., p. 101.

The object account listing for Salaries in Table 3.4 shows four subdivisions: Regular Employees, Temporary Employees, Overtime, and Sabbatical Leave. Note that the account structure at this second digit level (e.g., account 110 Salaries of Regular Employees) does not differentiate between certificated and noncertificated employees. To accomplish this separation, both in budget planning and in reporting and management, it would be necessary to establish third-level (digit) categories for Salaries of Regular Employees (e.g., Object 111 for Salaries of Regular Certificated Employees and Object 112 for Salaries of Regular Noncertificated Employees). Similar subdivisions can be established for the other types of second-level salary categories.

Personal Services-Employee Benefits. Amounts paid by the LEA on behalf of employees that are not included in the gross salary but are in addition to that amount. While these fringe benefit payments are not paid directly to employees, they are, nevertheless, part of the cost personal services.[21]

States and school districts provide a wide variety of employee benefits. To achieve some degree of standardization in recording and reporting among states, eight second-level subobject categories were established. They represent the most common types of employee benefits: Group Insurance, Social Security Contributions, Retirement Contributions, Tuition Reimbursement, Unemployment Compensation, Workmen's Compensation, Health Benefits, and Other Employee Benefits. If states or districts need additional or more detailed accounts for their particular benefit expenditures, they can create the necessary subaccounts and codes within the overall Personal Services-Employee Benefits object.

Note that the second (and third) level subcategories are specified by type of benefit, not type of personnel as in Salaries. There is no differentiation of benefits by type of personnel. Consequently, the benefits for certificated and noncertificated staff are not be recorded separately. To illustrate, group insurance expenditures for instructional staff for a school (teachers and aides) will be shown as a single amount, not one account for group insurance expenditures for teachers and a separate account for group insurance expenditures for aides.

Three objects of the expenditure categories are related to Purchased Services. These are used to record the budgeted costs of personnel and nonpersonnel services from individuals or firms outside the school district. The distinguishing aspect of purchased services is that they are performed by or purchased from individuals who are not employees of the school district or are from organizations or agencies outside the district. That is, the source of the purchased services is *external,* not internal. These categories cover a wide variety of items as shown in Table 3.4. The specific definitions for the major object of expenditure categories for Purchased Services are shown below. Again, individual state accounting systems may show some variation in specific accounts, but the general approach is similar.

21. Ibid., p. 102.

TABLE 3.4

Object Dimension of Expenditures

100	**Personal Services-Salaries**
110	Of Regular Employees
120	Of Temporary Employees
130	For Overtime
140	For Sabbatical Leave
200	**Personal Services-Employee Benefits**
210	Group Insurance
220	Social Security Contributions
230	Retirement Contributions
240	Tuition Reimbursement
250	Unemployment Compensation
260	Workmen's Compensation
290	Other Employee Benefits
300	**Purchased Professional and Technical Services**
310	Official/Administrative
320	Professional-Educational
330	Other Professional
340	Technical
400	**Purchased Property Services**
410	Utility Services
411	Water/Sewer
420	Cleaning Services
421	Disposal
422	Snow Plowing
423	Custodial
424	Lawn Care
430	Repair and Maintenance Services
440	Rentals
441	Rental of Land and Buildings
442	Rental of Equipment and Vehicles
450	Construction Services
490	Other Purchased Property Services
500	**Other Purchased Services**
510	Student Transportation Services
511	Student Transportation Purchased from Another LEA Within the State
512	Student Transportation Purchased from Another LEA Outside the State
513	Student Transportation Purchased from Other Sources
520	Insurance, Other than Employee Benefits
530	Communications
540	Advertising
550	Printing and Binding
560	Tuition
561	To other LEA's Within the State
562	To other LEA's Outside the State
563	To Private Schools
569	Other

(*continued*)

TABLE 3.4 *(continued)*

Object Dimension of Expenditures

570	Food Service Management
580	Travel
590	Miscellaneous Purchased Services
591	Services Purchased Locally
592	Services Purchased from Another LEA Within the State
593	Services Purchased from Another LEA Outside the State
600	**Supplies**
610	General Supplies
620	Energy
621	Natural Gas
622	Electricity
623	Bottled Gas
624	Oil
625	Coal
626	Gasoline
629	Other
630	Food
640	Books and Periodicals
700	**Property**
710	Land and Improvements
720	Buildings
730	Equipment
731	Machinery
732	Vehicles
733	Furniture and Fixtures
739	Other Equipment
800	**Other Objects**
810	Dues and Fees
820	Judgments Against the LEA
830	Interest
840	Contingency
890	Miscellaneous Expenditures
900	**Other Uses of Funds**
910	Redemption of Principal
920	Housing Authority Obligations
930	Fund Transfers

Purchased Professional and Technical Services. Services that by their nature can be performed only by persons or firms with specialized skills and knowledge. While a product may or may not result from the transaction, the primary reason for the purchase is the service rendered. Included are the services of architects, engineers, auditors, dentists, medical doctors, lawyers, consultants, teachers, accountants, etc.[22]

Purchased Property Services. Services purchased to operate, repair, maintain, and rent property owned or used by the LEA. These services are performed by persons other than LEA employees. While a product may or may not result from the transaction, the primary reason for the purchase is the service rendered.[23]

Other Purchased Services. Amounts paid for services rendered by organizations or personnel not on the payroll of the LEA (separate from Professional and Technical Services or Property Services). While a product may or may not result from the transaction, the primary reason for the purchase is the service rendered.[24]

Supplies. Amounts paid for items that are consumed, worn out, deteriorated through use, or those that lose their identity through fabrication or incorporation into different or more complex units or substances.[25]

Supplies are items purchased by the school district for current use, usually within one year. To be considered a supply, the item will have one or more of the following characteristics: it is consumed in use; it loses its original shape or appearance with use; it is expendable (i.e., it is more feasible to replace the article with an new unit rather than repair it); it is an inexpensive item; and/or it loses its identity through incorporation into another unit or substance.[26]

There is sometimes confusion over whether an item should be classified as a supply or an equipment item. To resolve the question, consider the criteria for equipment given below and the accompanying Figure 3.1. If the item does not qualify as equipment, it should be classified under the supply category.

Property. Expenditures for the purchase of land or existing buildings, improvements of grounds, initial equipment, additional equipment, and replacement of equipment.[27]

From this definition it is clear that expenditures for capital outlay are generally for more expensive items that are expected to be kept by the school district for more than one year and that are presumed to have benefits over several years.

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22. Ibid.

23. Ibid., p. 103.

24. Ibid., p. 104.

25. Ibid., p. 106.

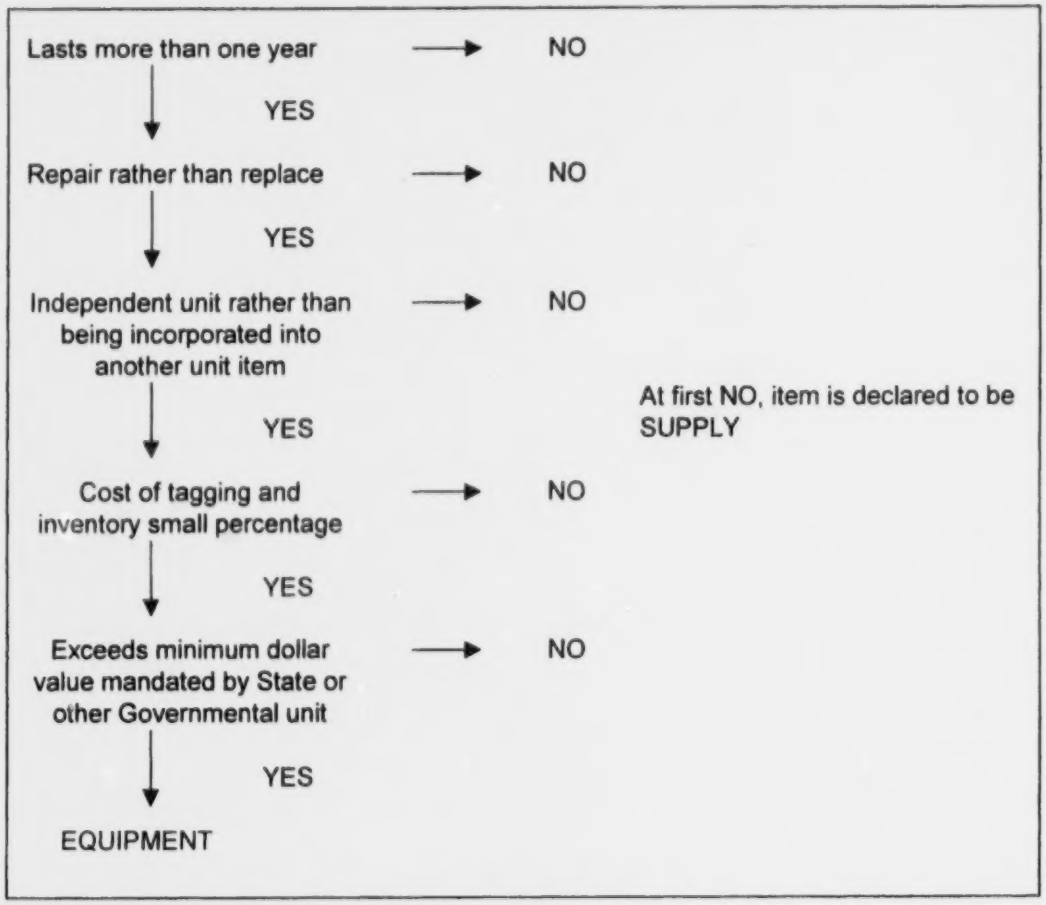
26. Charles T. Roberts and Allan R. Lichenberger, "Financial Accounting: Classifications and Standard Terminology for Local and State School Systems," *State Educational Records and Reports Series: Handbook II, Revised* (Washington, DC: U.S. Government Printing Office, 1973), p. 93.

27. Fowler, *Financial Accounting School Systems 1990*, p. 107.

FIGURE 3.1

Criteria for Distinguishing Equipment from Supply Items

(Listed in Priority Order)



Source: William J. Fowler, Financial Accounting for Local and State School Systems 1990, (Washington, DC: U.S. Government Printing Office, 1990), pp. 144b.

By far the most common type of capital outlay expenditure in the district's operating budget is for equipment. As noted above, occasionally it is difficult to differentiate between equipment and supplies when including an item in the budget. A material item is considered to be *equipment* when it meets *all* of the criteria listed below. The diagram in Figure 3.1 illustrates a procedure for determining whether an item should be classified as equipment or supply.

1. It retains its original shape, appearance, and character with use.
2. It does not lose its identity through fabrication or incorporation into a different or more complex unit or substance.
3. It is nonexpendable; that is, if the item is damaged or some of its parts are

lost or worn out, it is more feasible to repair the item than replace it with an entirely new unit.

4. Under normal conditions of use, including reasonable care and maintenance, it can be expected to serve its principal purpose for at least one year.[28]

Other Objects. Amounts paid for goods and services not otherwise classified.[29]

Other Uses of Funds. This series of codes is used to classify transactions that are not properly recorded as expenditures to the LEA but require budgetary or accounting control. These include redemption of principal and interest on long-term debt, housing authority obligations and fund transfers.[30]

Operational Unit Another useful way of classifying expenditures is by operational unit. This dimension can be used to categorize district expenditures by physical location, budget or cost center, or some combination of the two. Classification by operational unit makes it possible to collect and report expenditures by school building, district-level department, or other appropriate cost centers. When the operational unit classification matches fiscal information with the organizational structure of the district, accountability for budgeting and expenditure control is established with administrators of operational units in the district.

The operational unit dimension is generally optional for school districts, but it can greatly enhance the capability for financial management and administration. The coding system utilized for operational units will depend on the individual district, but it will allow each unit to be identified with a separate code number.

Expenditure Accounts Summary. Each expenditure is given a multi-part code to identify it along the various dimensions used in the district's expenditure accounting system. Each part of the code represents a single dimension. When this information is recorded into the books of account, or, more probably, into a computerized accounting system, it preserves all of the necessary data to summarize and report expenditure information along different dimensions for different purposes.

For example, assume that Evergreen School District has an expenditure accounting system that incorporates six different dimensions: Fund, Year, Function, Program, Object, and Operational Unit. To record the purchase of $100.00 of instructional supplies by Edison Elementary School, the following code would be entered along with the expenditure amount:

1 99 1000 100 610 105 $100.00

28. Ibid., p. 144.

29. Ibid., p. 109.

30. Ibid.

To those unfamiliar with the district's financial accounting system, the code numbers would be meaningless. However, those knowledgeable about the system would interpret the coded transaction as follows:

Dimension	Code	Explanation
Fund	1	General Fund
Year	99	School Year 1998-99
Function	1000	Instruction
Program	100	Regular Programs-Elem/Sec
Object	610	Instructional Supplies
Cost Center	105	Edison School

The format for the complete code of an expenditure item would depend on the particular district and its accounting system. However, in the version shown above each dimension has its own field in the overall code, separated by spaces for clarity.

If the district has additional dimensions in its expenditure accounting system, these codes would also be included in the complete code. Any or all of the other expenditure dimensions are available for use. However, there is a trade-off between the value and usefulness of the additional information and the costs of including further dimensions in the accounting system.

Revenues

Revenue is the income received by a school district. By formal definition, revenues are:

> *. . . additions to assets that do not increase any liability, do not represent the recovery of an expenditure, and do not represent the cancellation of certain liabilities without a corresponding decrease in other liabilities or a decrease in assets.*[31]

This definition distinguishes between revenues, which increase the net worth of the school district, and exchanges, which are other forms of money the district may receive that do not increase its net worth, such as expenditure reimbursements, repayment of debts, or exchange of an asset for cash. Budgeting for revenues consists of estimating the amount of revenue to be received by the school district during the upcoming year from each possible source. As noted before, revenues are an essential component of the district's budget. Revenues should be greater than or equal to expenditures in the budget. As a general rule, school districts are not allowed deficit spending. Consequently, accurate revenue projection is necessary to estimate the expenditures that can be supported, and in turn, to plan the educational program the district will provide.

31. Ibid., p 18

Revenue Classifications

Fund. In contrast to the expenditure classification system, revenue classification is quite simple. First revenues are classified by the *fund* to which they belong. All revenues, except those required to be recorded elsewhere, are classified in the General Fund. For example, monies from the sale of construction bonds are placed in a Capital Projects Fund to maintain them separately from regular district operations. On the other hand, basic education funding from the state, which has no expenditure restrictions, would be recorded in the General Fund.

Source. The most important means of categorizing revenues, however, is *source*. The classification system for revenues is based on the categories of possible sources for school districts. Other than by fund, this is the only classification dimension for revenues.

Revenue sources are divided into five main areas according to the level in the educational system: Local, Intermediate, State, Federal, and Other. A listing of the revenues by source and their codes is shown in Table 3.5.

Revenues have their own coding system, based on source and subdivisions within each source. A four-digit code is assigned to each revenue transaction; the first digit represents the major level of the source. For example, all local revenues are in the 1000 revenue category, while intermediate revenues have a 2000 code number, state revenues a 3000 code number, federal revenues a 4000 code number, and other revenues a 5000 code number. Further subdivisions within a major source use second and third digits in the code. For example, revenue account 1110 Ad Valorem (property) Taxes is a component of the more general account 1100 Taxes Levied/Assessed by the LEA.

Definitions of each of the major revenue sources illustrate the kinds of monies recorded under each type.

Local Revenues. The amount of money produced within the boundaries of the LEA and available to the LEA for its use. Money collected in the same amount by another governmental unit as an agent of the LEA (less collection costs), is recorded as revenue from local sources. Shared revenue (revenue levied by another governmental unit, but shared in proportion to the amount collected within the LEA) is also recorded as revenue from local sources.[32]

Local revenue sources are varied. As illustrated in Table 3.5, examples include taxes levied by or for the school district, tuition, transportation fees, earnings on investments made by the school district, food services, student activities for which fees are charged, community service activities, rentals, donations, and fees for services provided to others.

Intermediate Revenues. Revenue from funds collected by an intermediate administrative unit, or a political subdivision between the LEA and the state, and distributed to LEA's in amounts that differ in proportion to those collected within the systems.

32. Ibid.

TABLE 3.5

Revenue Categories

1000	**Revenue from Local Sources**
1100	Taxes Levied/Assessed by the LEA
1110	Ad Valorem Taxes
1120	Sales and Use Taxes
1130	Income Taxes
1140	Penalties and Interest on Taxes
1190	Other Taxes
1200	Revenue from Local Governmental Units Other than LEA's
1110	Ad Valorem Taxes
1120	Sales and Use Taxes
1130	Income Taxes
1140	Penalties and Interest on Taxes
1180	Revenue in Lieu of Taxes
1190	Other Taxes
1300	Tuition
1310	Tuition from Individuals
1320	Tuition from Other LEA's Within the State
1330	Tuition from Other LEA's Outside the State
1340	Tuition from Other Sources
1400	Transportation Fees
1410	Transportation fees from Individuals
1420	Transportation fees from Other LEA's Within the State
1430	Transportation fees from Other LEA's Outside the State
1440	Transportation fees from Other Sources
1500	Earnings on Investments
1510	Interest on Investments
1520	Dividends on Investments
1530	Gain or Loss on Sale of Investments
1540	Earnings on Investment in Real Property
1600	Food Services
1610	Daily Sales-Reimbursable Programs
1611	Daily Sales-School Lunch Program
1612	Daily Sales-School Breakfast Program
1613	Daily Sales-Special Milk Program
1620	Daily Sales-Non-Reimbursable Programs
1630	Special Functions
1700	Student Activities
1710	Admissions
1720	Bookstore Sales
1730	Student Organization Membership Dues and Fees
1740	Fees
1790	Other Student Activity Income
1800	Community Service Activities
1900	Other Revenue from Local Sources
1910	Rentals
1920	Contributions and Donations from Private Sources
1930	Gains and Losses on Sales of Fixed Assets (proprietary funds only)

(continued)

TABLE 3.5 *(continued)*

Revenue Categories

1940	Textbook Sales and Rentals
1941	Textbook Sales
1942	Textbook Rentals
1950	Services Provided to Other LEA's
1951	Services Provided to Other LEA's Within the State
1952	Services Provided to Other LEA's Outside the State
1960	Services Provided to Other Local Government Units
1970	Services Provided to Other Funds
1990	Miscellaneous
2000	**Revenue from Intermediate Sources**
2100	Unrestricted Grants-In-Aid
2200	Restricted Grants-In-Aid
2800	Revenue in Lieu of Taxes
2900	Revenue for/on Behalf of the LEA
3000	**Revenue from State Sources**
3100	Unrestricted Grants-In-Aid
3200	Restricted Grants-In-Aid
3800	Revenue in Lieu of Taxes
3900	Revenue for/on Behalf of the LEA
4000	**Revenue from Federal Sources**
4100	Unrestricted Grants-in-Aid Direct from the Federal Government
4200	Unrestricted Grants-In-Aid from Federal Government through the State
4300	Restricted Grants-in-Aid Direct from the Federal Government
4500	Restricted Grants-In-Aid from Federal Government through the State
4700	Grants-In-Aid from Federal Government through Other Agencies
4800	Revenue in Lieu of Taxes
4900	Revenue for/on Behalf of the LEA
5000	**Other Sources (governmental funds only)**
5100	Sale of Bonds
5110	Bond Principal
5120	Premium
5130	Accrued Interest
5200	Interfund Transfers
5300	Sale or Compensation for Loss of Fixed Assets

Source: William J. Fowler, Financial Accounting for Local and State School Systems 1990, (Washington, DC: U.S. Government Printing Office, 1990), pp. 19-23.

State Revenues. Revenue from funds produced within state boundaries, collected by the state, and distributed to LEA's in amounts proportionately different from those collected within the LEA's.

Federal Revenues. Revenue from funds collected by the Federal Government and distributed to LEA's in amounts that differ in proportion from those collected within the LEA's. In determining whether a revenue is Federal, it is unimportant whether the funds are distributed directly to the LEA by the Federal Government or through some intervening agency such as the state.

Other Sources. Revenues received by the school district that are not accounted for under the other four categories. Examples include such transactions as Sale of Bonds, Interfund Transfers, and Sale or Compensation for Loss of Fixed Assets.[33]

Types of outside aid. The bulk of funds received by school districts from outside (non-local) sources fall into one of three categories: unrestricted grants-in-aid, restricted grants-in aid, and revenue in lieu of taxes. These categories comprise the subsources listed for intermediate, state, and federal revenue sources in Table 3.5.

1. *Unrestricted Grants-in-Aid.* These funds are often referred to as *General Aid* monies. They are provided to the district for educational purposes from state and federal agencies without any restriction as to their use. The district can use these funds for any legal purpose. The bulk of state support comes to districts in this form. These funds can be viewed as the state's share of the costs of basic education for students in the state. On the other hand, few federal funds districts receive fall into this category.
2. *Restricted Grants-in Aid.* These funds are commonly known as *Categorical Aid.* They are provided to school districts for particular purposes, such as education for disabled children, vocational education, and compensatory education. They can only be used for their designated purposes. The state and federal government provide these funds to encourage school districts to undertake certain activities or programs they might otherwise find too expensive to operate from local funds alone, and to assist the districts in operating state mandated programs. Special accounting records are necessary to record the receipt and expenditure of these funds for the appropriate purposes. Most of the revenues received by school districts from the federal government are categorical and targeted for specific purposes or populations.
3. *Revenue in Lieu of Taxes.* State or federal property located within school district boundaries is not taxable. If the amount of property removed from the tax rolls is substantial, for example a large military installation or a national forest, then the loss of property tax revenues that would have

33. Ibid.

been collected from private property can have a serious impact on the district. Additionally, due to state or federal government action, certain privately owned property may not be taxed on the same basis as other privately owned property. For example, in some states, timberland is not subject to a local property tax. Instead, timber owners pay a severance tax to the state on the timber when it is harvested. This allows the owners to match the timing of their own revenues and taxes, but it eliminates regular property tax payments to school districts. To reduce the impact of the state and federal activities, these governments make payments to school districts designed to replace the lost property taxes. These payments are known as *revenue in lieu of taxes.* They come to districts without restrictions on their use and function as unrestricted funds.

Revenue Accounts Summary. When recording a revenue transaction, it is first necessary to determine the fund to receive the credit for the revenue. The next step is to identify the major source from which the revenue is obtained: local, intermediate, state, federal, or other. The final task is to specify the particular type of revenue within the major source. Then the revenue amount can be entered into the books of account properly, and the revenue information correctly maintained. For example, a common type of revenue is basic state aid received by the school district at regular intervals during the school year. The fund for these revenues would be the General Fund because they are not restricted to any special purposes The major source would be Revenue from State Sources, and within this category the more specific source would be revenue account 3100, Unrestricted Grants-in-Aid. If there are several different types of unrestricted state revenues, the state or district accounting manual would have further detailed subsource revenue codes to distinguish among them. In this way, the different types of revenues can be kept separate for reporting and management purposes.

Financial Statements

Useful financial information about the school district in the form of financial reports is an important product of the accounting system. Financial reporting should assist in fulfilling the government's duty to be publicly accountable and should enable users to assess that accountability.

a. Financial reporting should provide information to determine whether current-year revenues were sufficient to pay for current-year services.
b. Financial reporting should demonstrate whether resources were obtained and used according to the entity's legally adopted budget. It should also demonstrate compliance with other finance-related legal or contractual requirements.
c. Financial reporting should provide information to help users assess the

service efforts, costs, and accomplishments of the governmental entity.[34]

Financial reports for school districts can be separated into two groups based on their intended audience: 1) external reports designed to communicate with those outside the school district, and 2) internal reports designed for planning, analysis, and management control purposes within the school district. This section concentrates on financial reports for external audiences; management control reports are reviewed in Chapter 7.

Financial reports for external use present summaries of relevant fiscal data to inform various individuals and groups about the financial status of the district. Those groups most interested in the output of the financial reporting system are school administrators, school boards and other governing units, state and federal legislative bodies, creditors, and the general public, including taxpayers.[35]

Types of Financial Statements

There are three types of general purpose financial statements common for school districts. Each has a different objective in portraying the financial condition and activities of the school district.[36] All should be prepared in accord with generally accepted accounting principles, which provide a uniform basis for financial accounting and reporting. The three types of statements are:

1. Combined Balance Sheet-All Fund Types and Account Groups.
2. Combined Statement of Revenues, Expenditures, and Changes in Fund Balances.
3. Combined Statement of Revenues, Expenditures, and Changes in Fund Balances-Budget and Actual.

The combined statement refers to the inclusion of all funds in the statement, even though each fund is a separate accounting entity. This is done by using a separate column for each fund used in the district's accounting system. Financial statements can also be prepared for only a single fund. At the present, this practice is being challenged by those who argue that a single statement including aggregated information from all funds presents the information in a more useful fashion more akin to financial statements of private sector companies.

Balance sheet. The combined balance sheet is designed to summarize the assets, liabilities, and fund balances of the district at a particular time—generally the end of a fiscal year. Separate columns are used for each of the funds and account groups and the amounts for each type of account are totaled across the funds for information purposes only. The emphasis in the balance sheet is on resources available to fulfill fund objectives.

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34. GASB, *Codification*, para. 1100.177.

35. Fowler, *Financial Accounting School Systems 1990*, p. 7.

36. Ibid., pp. 123-131 provides examples of financial statements used by school districts. One additional statement is suggested for proprietary and non-expendable trust funds, a Combined Statement of Changes in Financial Position.

FIGURE 3.2

Statement of Revenues, Expenditures, and Changes in Fund Balance-All Governmental Fund Types and Expendable Trust Funds

Example B.–School district XYZ: combined statement of revenues, expenditures, and changes in fund balances; all governmental fund types and expendable trust funds, for the fiscal year ended June 30, 19XX

	Governmental fund types				Fiduciary fund type	Totals (memorandum only)
	General	Special revenue	Debt service	Capital projects	Expendable trust	
Revenues:						
Local sources:						
Taxes	$1,016,660	$238,000	$110,000			$1,364,660
Tuition	17,440					17,440
Earnings on investments	2,200	1,000	17,840	$42,050	$200	63,290
Textbook rentals	9,250					9,250
	1,045,550	239,000	127,840	42,050	200	1,454,640
State sources:						
Unrestricted grants-in-aid	413,000					413,000
Restricted grants-in-aid	30,000	2,400	14,000			46,400
	443,000	2,400	14,000			459,400
Federal sources:						
Unrestricted grants-in-aid	8,900					8,900
Restricted grants-in-aid	100,000	19,000				119,000
	108,900	19,000				127,900
Total revenues	1,597,450	260,400	141,840	42,050	200	2,041,940
Expenditures:						
Instruction services						
Regular education programs	680,590	19,010				699,600
Special programs	134,200	161,230				295,430
Vocational education programs	86,270					86,270
Other instructional programs	42,090					42,090
Nonpublic school programs	1,290	4,760				6,050
Adult/continuing education programs	10,430					10,430
Community services programs	3,710					3,710
	958,580	185,000				1,143,580
Supporting services:						
Student	78,500	14,800				93,300
Instructional staff	51,350	9,200				60,550
General administration	52,100	18,000				70,100
School administration	141,980					141,980
Business	19,970					19,970
Operation and maintenance of plant	169,080					169,080
Student transportation	17,250					17,250
Central	10,840					10,840
Other	46,820					46,820
	587,890	42,000				629,890

(continued)

FIGURE 3.2 *(continued)*

Statement of Revenues, Expenditures, and Changes in Fund Balance-All Governmental Fund Types and Expendable Trust Funds

Example B.–School district XYZ: combined statement of revenues, expenditures, and changes in fund balances; all governmental fund types and expendable trust funds, for the fiscal year ended June 30, 19XX–continued

	Governmental fund types				Fiduciary fund type	Totals (memorandum only)
	General	Special revenue	Debt service	Capital projects	Expendable trust	
Expenditures–continued:						
Operation of non-instructional services					2,420	2,420
Facilities acquisition and construction services				813,800		813,800
Debt service			114,420			114,420
Total expenditures	1,546,470	227,000	114,420	813,800	2,420	2,704,110
Excess of revenues over (under) expenditures	50,980	33,400	27,420	(771,750)	(2,220)	(662,170)
Other financing sources (uses):						
Proceeds from the sale of bonds				950,000		950,000
Operating transfers in				18,000	2,530	20,530
Operating transfers out	(50,000)					(50,000)
Total other financing sources (uses)	(50,000)			968,000	2,530	920,530
Excess of revenues and other sources over (under) expenditures and other uses	980	33,400	27,420	196,250	310	258,360
Fund balances–July 1	201,070	85,550	142,290	139,650	26,560	595,120
Fund balances–June 30	202,050	118,950	169,710	335,900	26,870	853,480

The notes to the financial statement are an integral part of this statement.

Source: William J. Fowler, Financial Accounting for Local and State School Systems 1990 (Washington, DC: National Center for Educational Statistics, 1990), p. 127-128.

Statement of revenues, expenditures, and changes in fund balance. Of more direct concern to school budgeting are revenue and expenditure statements during the year that report the level of financial activity. This type of statement, shown in Figure 3.2, compares the current-year revenues received with expenditures for the same time period on a fund-by-fund basis. Included in this statement are all governmental funds and expendable trust funds. Adjustments are made to account for other financing uses or sources (e.g., transfers between funds), and the results calculated to see the excess or deficit of revenues over expenditures for the year. The excess of revenues over expenditures (or the shortfall) is added to (or subtracted from) the fund balance at the beginning of the fiscal year to calculate the fund balance at the end of the year.

This statement also has separate columns for each fund to report the results of each independent financial entity. The total amount across all funds for the same type of revenue or expenditure is for information only.

Statement of revenues, expenditures, and changes in fund balance-budget and actual. As the title suggests, this statement is quite similar to the previous statement with two exceptions. First, it is for General and Special Revenue funds only. Proprietary and Non-Expendable Trust funds have a separate, identical statement for their operations. The second difference is that this statement presents budgeted amounts and compares them with the actual amounts. Consequently, this statement is of particular interest for management of budgets during the year.

As shown in Figure 3.3, the revenues actually received for the year are summarized and matched against the revenue projections on a source by source basis. Overages represent more actual revenue taken in than was originally budgeted, while underages indicate a shortfall. The same comparison is done for expenditures, except that overages here represent actual expenditures greater than those budgeted, and underages show accounts where actual expenditures were less than those budgeted.

Similar statements can be prepared during the year to present interim results for a three- or six-month period. If serious deviations from the budget are indicated, there may be time to correct them. Used in this manner, the financial statement can be a management tool rather than a historical report.

Summary

For both developing budgets and managing operations, administrators need to know the school accounting system used in their state and district. Financial information is vital to successful management. Budgets are built using the accounting structure as the format. Expenditures are estimated according to function, program, object, and cost center dimensions. These generally correspond to the organizational structure of the school district and provide a direct fiscal accountability for administrators. Without a fluent working knowledge of the accounting system's expenditure dimensions, school administrators cannot understand and control their operations.

Revenues accounts, on the other hand, are not regularly used by most school building administrators. They are, however, very important in budget development and fiscal management. Including all feasible revenue sources and proper recording receipts are essential aspects of financial administration. Monitoring actual collections by individual revenue sources during the year provides district-level administrators with an early warning system for shortfalls and with information about which revenue sources are seriously different than projected.

A final comment concerns the consequences of information or lack of information by school administrators. Information is power, particularly budget

FIGURE 3.3

Statement of Revenues, Expenditures, and Changes in Fund Balance-Budget and Actual-General and Special Revenue Fund Types

Example C.–School district XYZ: statements of revenues, expenditures, and changes in fund balances–budget and actual; general and special revenue fund types, for the fiscal year ended June 30, 19XX

	General fund			Special revenue funds		
	Budget	Actual	Over (under) budget	Budget	Actual	Over (under) budget
Revenues:						
Local sources:						
Taxes	$1,202,700	$1,146,660	($56,040)	$89,000	$109,000	$20,000
Tuition	14,000	17,440	3,440			
Earnings on investments	3,500	2,200	(1,300)			
Textbook sales and rentals	8,600	9,250	650			
	1,228,800	1,175,550	(53,250)	89,000	109,000	20,000
State sources:						
Unrestricted grants-in-aid	485,000	413,000	(72,000)			
Restricted grant-in-aid				34,000	32,400	(1,600)
	485,000	413,000	(72,000)	34,000	32,400	(1,600)
Federal sources:						
Unrestricted grants-in-aid	9,200	8,900	(300)			
Restricted grants-in-aid				112,000	119,000	7,000
	9,200	8,900	(300)	112,000	119,000	7,000
Total revenues	1,723,000	1,597,450	(125,550)	235,000	260,400	25,400
Expenditures:						
Instruction services						
Regular education programs	685,000	680,590	(4,410)	20,000	19,010	(990)
Special programs	137,000	134,200	(2,800)	165,000	161,230	(3,770)
Vocational education programs	83,000	86,270	3,270			
Other instructional programs	45,000	42,090	(2,910)			
Nonpublic school programs	1,000	1,290	290	5,000	4,760	(240)
Adult-continuing education programs	10,000	10,430	430			
Community services programs	4,000	3,710	(290)			
	965,000	958,580	(6,420)	190,000	185,000	(5,000)
Supporting services						
Student	79,500	78,500	(1,000)	13,000	14,800	1,800
Instructional staff	50,900	51,350	450	11,500	9,200	(2,300)
General administration	54,800	52,100	(2,700)	20,500	18,000	(2,500)
School administration	152,000	141,980	(10,020)			
Business	18,000	19,970	1,970			
Operation and maintenance of plant	142,000	169,080	27,080			
Student transportation	30,800	17,250	(13,550)			
Central	12,000	10,840	(1,160)			
Other	50,000	46,820	(3,180)			
	590,000	587,890	(2,110)	45,000	42,000	(3,000)
Total expenditures	1,555,000	1,546,470	(8,530)	235,000	227,000	(8,000)
Excess of revenues over (under) expenditures	168,000	50,980	(117,020)		33,400	33,400
Other financing sources (uses) operating transfers out	(50,000)	(50,000)				
Excess of revenues and other sources over (under) expenditures and other uses	118,000	980	(117,020)		33,400	33,400
Fund balances–July 1	201,070	201,070		85,550	85,550	
Fund balances–June 30	319,070	202,050	(117,020)	85,550	118,950	33,400

The notes to the financial statements are an integral part of this statement.

Source: William J. Fowler, *Financial Accounting for Local and State School Systems 1990* (Washington, DC: National Center for Educational Statistics, 1990), p. 129.

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and financial information. Those administrators who have and understand the financial information about their operations are in position to control those operations. This does not mean they should reduce costs to a minimum, cut back programs to show underexpenditures on a cost report, or let the fiscal side dominate operations. Just the reverse. By knowing the budget accounts, administrators are in a position to use their budgets to the maximum, to manipulate the financial resources under their authority to provide the most effective educational programs, and to be in charge of and give direction to their programs. Administrators who do not control their budget, will be controlled by it. Understanding school accounting provides the language to deal with fiscal activities in the school district.

Problems

3.1 Specify the proper expenditure codes for the items listed below. Use the listings of funds (Table 3.1), functions (Table 3.2), and objects (Table 3.4) or your own state's accounting manual as a reference source. For each item identify the fund, function, and object code to the lowest level given the available information. For instructional items, use a combined Function/Program code to identify the activity more completely. The listing for programs is in Table 3.3. For example:

	FUND	FUNCTION /PROGRAM	OBJECT
Salary of Elementary Teacher	1 (General)	1100 (Instruction/ Regular-E/S)	110 (Regular Employees)
Contract for Snow Plowing School Driveways	1 (General)	2620 (Care & Upkeep of Grounds)	422 (Snow Plowing)

a) Retirement contribution for district Guidance Supervisor.

b) Cost of an outside consultant to assist in the development and implementation of a new budgeting system for the district.

c) Salary of a high school French teacher.

d) Rental of a typewriter for a school principal's office.

e) Standardized testing materials to use for psychological testing of district students.

f) New instruments for a junior high school band program.

g) Tuition paid to a neighboring school district for a student from this

district attending classes in that high school.

h) Salary of a temporary instructional aide (noncertificated) in a class for emotionally disturbed students.

i) Reimbursement of travel expenses for a school librarian to attend the national American Librarian's Association convention in another state.

j) Annual interest due on school construction bonds.

k) Overtime to the secretary of the district superintendent.

l) Maintenance agreement for the mini-computer used in the district's data processing office.

m) New typewriter to replace worn-out model in elementary school. Typewriter is used by teachers to prepare instructional materials.

n) Honorarium for out-of-state expert to provide workshop for district teachers on improving teaching effectiveness.

o) District payment of professional association membership dues for the director of the community services program.

p) Textbooks for the district's introductory adult education classes.

q) Transfer of funds from General Fund to Capital Reserve Fund.

r) An additional pure tone audiometer for testing children with suspected hearing deficiencies.

s) Purchase of new school buses with seat belts for general district use.

t) Separate telephone line for the district school social worker to use to contact parents.

3.2 Specify the proper revenue codes for the items listed below. Use the revenue listings in Table 3.5 or your own state's accounting manual as a reference source. For each item, identify the fund and revenue code. For example:

	FUND	REVENUE
Tuition from individuals attending adult education classes	1 (General)	1310 (Tuition from Individuals)

a) General aid for basic school support from the state.

b) Sales of meals to students in a school lunchroom.

c) District levy for property taxes.

d) State funds for vocational education.

e) Annual tuition payment from another school district for four of their students attending regular day classes in this district.

f) Monies for inservice training from the intermediate education unit in which this district is situated.

g) Admission receipts collected from the high school football games.

h) Funds for the education of handicapped children from the U.S. Department of Education.

i) Penalties paid on overdue local taxes.

j) Monies from the bilingual educational appropriation provided by the state.

k) Sale of seven excess school buses at book value.

l) Interest on funds invested in short-term money market accounts.

m) Receipts from rental of district property.

n) Payments from parents for transportation of their children during summer school.

o) Receipts from sale of construction bonds.

Notes

Building the Budget 4

Introduction

The principal task of the budget process is to develop the budget document itself. Using the Meritorious Budget Award (MBA) format (see Chapter 1), the three principal sections of the budget document are Organizational, Financial, and Informational. The Organizational section sets the context for the budget with the district's mission, goals, and objectives; its formal organizational structure; an overview of relevant budget and financial policies; and a description of the budget process itself. These are important elements for communicating with the public and justifying the need for funds. However, the bulk of the document is devoted to the Financial section, which presents estimates for expenditures and revenues, and the Informational section, where a variety of supporting data are included.

This chapter focuses on the procedures for developing expenditure and revenue projections. Numerous supporting calculations are required (e.g., students, personnel, property values) to reach the final expenditure and revenue numbers, and these procedures are also included.

It should be emphasized that budget numbers are estimates. They represent the district's best judgments of how much money it will spend and how much it will collect. The budget cycle requires districts to make these estimates well in advance of their actual occurrences. Districts that prepare their budget document in January or February are estimating expenditures and revenues that will occur up to 18 months in the future—June of the following year. This is well before the number of students for the next year is known, sometimes before the salary levels have been established, perhaps before the State Legislature has determined the level of state aid, and often before new prices for supplies and equipment are provided by vendors. Further, some of the expenditures, such as utility bills, insurance premiums, and interest payments, will be largely out of the control of school personnel.

Despite these difficulties, the anticipated expenditures and revenues must be estimated. While every effort should be made to make them accurate, administrators should not be discouraged if the actual expenditure and revenue results do not precisely match the estimated; they were never intended to. The original estimates are just that—the best guesses at the time. They can be updated later in the process if better information becomes available, and adjustments can be made during the operating year to accommodate differences between the estimates and

the actual circumstances.

This does not mean, however, that significant deviations are not a cause for concern; they are. Large variations between budgeted and actual numbers should be examined carefully, as they could indicate errors in the estimation process or problems in the spending control procedures used by the district. Further, since the adopted budget sets the district's spending limits, it is important that the estimates are substantially correct, at least in total. For example, if revenues are estimated too high and there is a revenue shortfall or if certain expenditures are significantly greater than estimated, the district may have to reduce spending precipitously in the final few months of the school year to avoid overspending available revenues. Conversely, underestimating revenues or overestimating important expenditure categories could leave the district with an overly large cash balance at year end, leading to questions about excessive taxation and/or complaints about the missed educational opportunities for expanded or improved programs.

Roadmap For Budget Development

This section provides an overview of the sequence and relationships among the steps for making appropriate budget estimates— a roadmap through the budget development process. The purpose of the roadmap is illustrate why each technique is needed, what information is developed, and how it contributes to complete the budget estimates.

The major estimation steps in budget development are:

1. Projecting the number of students
2. Determining personnel requirements
3 Estimating expenditures
4 Estimating revenues
5. Balancing the budget

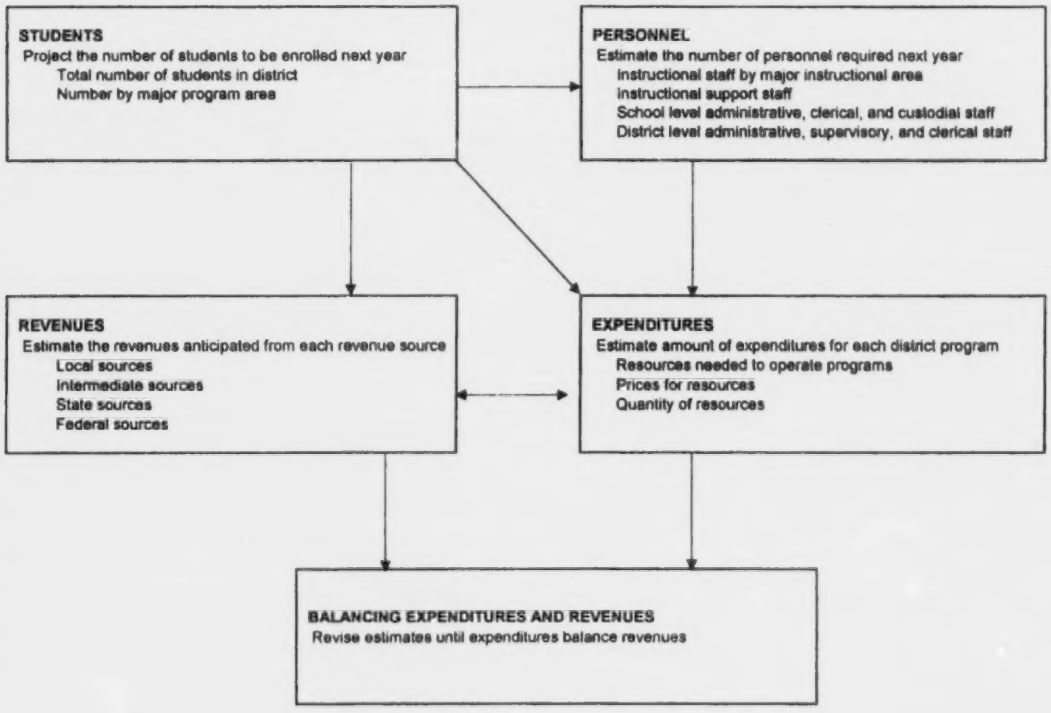
The general order and content of each step is illustrated in Figure 4.1. Each is examined in detail in subsequent sections of this chapter.

Student enrollment. The first step is to estimate the number of students expected for the upcoming year. This establishes basic information on the anticipated level of operation within the school district. Projections are done for the total number of students in the district and also by the number of students in each school building and major program area (e.g., grade level, and special categories receiving earmarked funding such as handicapped, gifted, and bilingual students).

Personnel. Once the enrollment projections are completed, the number of personnel needed to operate the district's programs can be estimated. The numbers of instructional and instructional support personnel are based on the projected numbers of students and district staffing policies. The administrative, supervisory, and classified personnel requirements, however, are generally deter-

FIGURE 4.1

Steps in Building Budget Estimates


STUDENTS
Project the number of students to be enrolled next year
Total number of students in district
Number by major program area
PERSONNEL
Estimate the number of personnel required next year
Instructional staff by major instructional area
Instructional support staff
School level administrative, clerical, and custodial staff
District level administrative, supervisory, and clerical staff
REVENUES
Estimate the revenues anticipated from each revenue source
Local sources
Intermediate sources
State sources
Federal sources
EXPENDITURES
Estimate amount of expenditures for each district program
Resources needed to operate programs
Prices for resources
Quantity of resources
BALANCING EXPENDITURES AND REVENUES
Revise estimates until expenditures balance revenues

mined by the size of the district and the workload in each operation.

Expenditures. Following personnel projections, expenditures needed to operate each of the district's instructional, support, and administrative programs are calculated. This is accomplished by establishing the types and quantities of resources needed for each program, the prices for each resource, and a capacity measure for each program (such as student/teacher ratios, specialists' caseloads, staffing patterns, and policies).

Revenues. On a parallel track, estimates of the revenues anticipated from local, intermediate, state, and federal sources are developed. Particular emphasis is given to the amount of local property taxes required and the district's tax rate.

Balancing the budget. The last major step is to balance the planned expenditure level with the expected revenues expected. Total planned expenditures are compared with total available revenues. If expenditures are greater, then planned expenditures must be reduced or revenues must be increased (or both) until expenditures equal revenues.

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Student Enrollment Projections

Student enrollments are a key factor in budget development. They determine or influence many of financial estimates that go into the budget, particularly in the instructional area. Most types of personnel requirements are derived directly or indirectly from estimates of the number of students to be served. For example, the number of teachers is established using the estimated enrollments and district student/teacher policies. Allocations to schools for instructional supplies, materials, and equipment are frequently made based on projected student enrollments. The needs for facilities, such as number of schools or classrooms, are calculated using the projected enrollments, as are the level of support services. In addition, certain revenue projections may also be directly related to the number of students in the school district. State or federal aid, which is distributed to districts on a dollar per student basis, is determined by multiplying the number of students by the dollar per student aid amount.

There are several different approaches to counting the number of students in a school district. The approach selected will probably be determined by state department of education's student accounting definitions. The two principal approaches are average daily membership (ADM) and average daily attendance (ADA). ADM counts all students enrolled in school (that is, on the membership list) whether or not they are actually attending school at the time the student count is taken. ADA, on the other hand, counts only those students actually attending school at the time the count is made. The difference between the two approaches is how they treat absences; ADM counts will always be higher than ADA counts, a situation that disadvantages school districts with high absentee rates. Modifications to the basic approaches are possible—including excused absences as part of ADA counts, for example.

Another differentiation that may be made in student counts is enrollment versus full-time equivalent (FTE) counts. Enrollment generally corresponds to head counts of students, where every student enrolled in a program counts as one whether full-time or part-time. FTE counts adjust the number of students for the actual amount of time in a program. A student who participates part-time in a particular program is counted only for that fraction of time. For example, in a student accounting system requiring this differentiation, a mildly handicapped student receiving special education in a resource room for one period out of five periods in the school day would have an FTE count of 0.20 in special education and 0.80 in regular education.

ADA or FTE student counts do not necessarily correspond to how school districts must plan and budget for programs. The special education student in the previous example will probably require a full complement of services in regular education even though the FTE enrollment is only 0.80. The period each day spent

outside the classroom in the resource room is of very little budgetary significance to the regular classroom: The teacher is paid the same, the student's desk remains and takes up the same space, and heat and light consumption are not reduced. Perhaps some instructional materials are not required, but these are usually quite minor. As a result, school districts operating under an ADA or FTE approach may have to maintain two separate, but related student accounting procedures—one for state reporting and one for local planning and budgeting.

Enrollment projections are usually done centrally for the school district, either by district office personnel or through a contract arrangement with an outside vendor. To build the budget for the next fiscal year, detailed estimates of the number of students to be served in the school district that year are needed. These projections generally are made along several dimensions—district total, school building, grade level, and type of student (regular, handicapped, bilingual, vocational, and compensatory). Consequently, the dimensions used by the school district to project next year's student enrollments should correspond to the instructional and instructional support programs the district is planning to provide its students.

Once the projections are completed, the relevant results are provided to the district personnel developing the budget requests for each program or organizational area. For example, estimates of individual school enrollments, both in total and by grade level, are frequently given to building principals to use in their budget preparation activities. Likewise, the special education director would receive estimates of the number of students with handicapping conditions (by type of handicap, age, and severity of condition) to establish a baseline for developing a budget request in that area. The enrollment projections would then be used to estimate total personnel requirements and allocation of positions among different grades or types of students, as well as to determine the amount of money available for instructional supplies and equipment.

Enrollment Projection Techniques

There are several different methods for estimating student enrollments for the upcoming year. They range from simple to sophisticated, and vary in their reliability. The simplest approach is an educated guess by the district superintendent and/or others based on the current enrollments and their projections about what may occur next year. This approach is fast, inexpensive, and understandable. It can also incorporate relevant information about district economic, social, or political conditions into the enrollment estimates. On the other hand, it is also subject to considerable error or bias since the estimates are derived from subjective assessments.

Other more formalized projection approaches have been successful in estimating student enrollments. They use various mathematical forecasting tech-

niques for projecting future enrollments based on past trends.[1] However, the basic rationale underlying these extrapolative techniques is the assumption that the same conditions affecting enrollment in the past will continue to prevail in the future. This may not be the case in districts undergoing demographic and economic changes. These assumptions and conditions should be examined to see if they make sense in light of what administrators know or believe about the district's condition in the upcoming year. Adjustments can and should be made to the projections calculated by the forecasting techniques to reflect accurately changes in the district's future. For example, a district that has been economically depressed and losing population for the past several years may not want to project a decreasing enrollment trend into the next year if several manufacturing firms have opened up new plants in the community and the economy is showing signs of recovering.

Trend line analysis.[2] Trend line analysis is a form of linear regression that uses the year as the predictor variable and the district enrollment as the dependent or predicted variable. With a spreadsheet, a simple statistical program on a computer, or even a statistical hand calculator, it is possible to calculate future enrollments easily. The data needed are the enrollments of the pertinent populations for each of the past five or six years. Future years' enrollments are estimated by projecting the trend line from the past years' data. The statistical methodology of linear regression is used to calculate the line of "best fit" for the previous enrollments. The result is an equation of a straight line.

Future Enrollment = Constant + (Coefficient x Future Year)

A future year is substituted into this equation and the estimated enrollment for that future year is calculated. This procedure is illustrated in Figure 4.2. In this example, the school district's enrollments have been fluctuating up and down over the past several years, with two years showing increases and two years showing declines. The problem is to project the enrollments for the next three years. Using the past five years' enrollments, a trend line is calculated to estimate future years' enrollments. The trend line equation is

FORECAST ENROLLMENT = 5,559 + 38.2 x YEAR NUMBER

Note that the number of the year (1 for 1993, 2 for 1994) is substituted for the actual year date. This does not change the results of the trend line equation at all, but only makes the calculations easier and clearer. To obtain the projected enrollment for the next year, 1998 (Year 6), the number of the year (6) is substituted into the equation and an estimate of 5,788 students is obtained (5,559 + 38.2 * 6). This procedure

1. For a discussion of enrollment projection techniques, see R. Craig Wood, David C. Thompson, Lawrence O. Picus, and Don I. Tharpe, *Principles of School Business Management*, 2nd edition (Reston, VA: Association of School Business Officials International, 1995), Chapter 8, pp. 31-36.

2. Trend line analysis is one example of a curve fitting technique to match historical data. For others see Guilbert Hentschke, *Management Operations in Education* (Berkeley, CA: McCutchan, 1975), pp. 368-72.

FIGURE 4.2

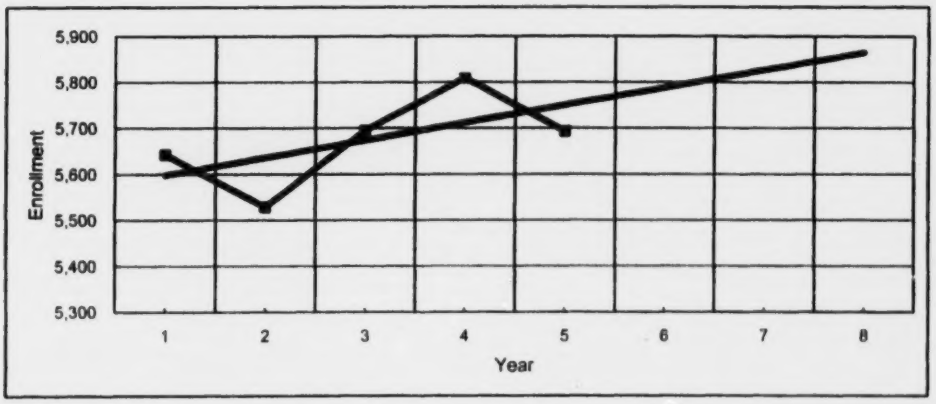
Trend Line Analysis Projection Example

PAST YEAR'S DATA

Year	Year Number	Student Enrollment
1993	1	5,642
1994	2	5,529
1995	3	5,695
1996	4	5,809
1997	5	5,693

FUTURE YEAR'S DATA

Year	Year Number	Student Enrollment
1998	6	?
1999	7	?
2000	8	?



TREND LINE PROJECTION FOR NEXT THREE YEARS

Trend Line Is Calculated Using a Linear Regression Equation

Year	Forecast Enrollment						Year Number
1998	5,788	=	5,559	+	38.2	x	6
1999	5,826	=	5,559	+	38.2	x	7
2000	5,865	=	5,559	+	38.2	x	8

assumes that the student enrollments will be growing as shown by the trend line in Figure 4.2 (approximately 38 students per year) and that any past or future differences from the line are relatively minor deviations from the prevailing long-term trend.

Cohort survival. Another enrollment forecasting technique, termed cohort survival, treats each grade level as a cohort and the passage of students from one grade level to the next is followed through the school system from year to year. This is illustrated in Figure 4.3.

FIGURE 4.3

Cohort Survival Enrollment Projection Example

ELEMENTARY ENROLLMENTS

Grade	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98
K	920	941	877	855	868	843
1	856	915	938	826	836	888
2	813	845	905	887	804	824
3	847	805	843	879	934	819
4	828	830	803	799	913	923
5	842	799	838	789	832	923
K-5	5,106	5,135	5,204	5,035	5,187	5,220

SURVIVAL RATES

Grade	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	5 Year Average
K							
1		[illegible]	0.997	0.942	0.978	1.023	0.987
2		0.987	[illegible]	0.946	0.973	0.986	0.976
3		0.990	0.998	[illegible]	1.053	1.019	1.006
4		0.980	0.998	0.948	[illegible]	0.988	0.990
5		0.965	1.010	0.983	1.041	[illegible]	1.002

ENROLLMENT PROJECTIONS

Grade	Average Survival Ratio	Actual 1997-98	Projected 1998-99	Projected 1999-2000	Projected 2000-01
K*		843	865	884	897
1	0.987	888	832	854	872
2	0.976	824	867	812	833
3	1.006	819	829	872	817
4	0.990	923	811	821	864
5	1.002	923	925	813	823
K-5		5,220	5,129	5,056	5,106

* Kindergarten enrollments estimated independently from live birth data.

The 920 kindergarten students in 1992-93 became the 915 first grade students in 1993-94, and then the 905 second grade students in 1994-95, and so forth. The number of students enrolled in each grade level is listed for each of the past five or six years. Then a survival rate is calculated for each transition from one grade to the next. For example, the survival rate of kindergartners to first graders from 1992-93 to 1993-94 was 0.995 (915/920). Similar rates are calculated for each grade/year cell in the enrollment data matrix. Using the various years' rates, an average for each grade to grade transition is calculated over the given time period. In the example, the five-year average survival rate for kindergarten to first grade was 0.987, which is the average of the individual survival rates of kindergarten to first grade from 1992-93 through 1997-98, which ranged from 0.942 to 1.023.

This method does not trace individual children; it only is concerned with the aggregate numbers in each grade each year. Not all of the children in the following grade were necessarily in the prior grade. Transfers into the next grade from outside the school system are common. When more students transfer into than leave the school system, the survival rate will be greater than 1.0. This was the case in several grades in the example. The average survival rates are then used to project future enrollments on a grade by grade basis. The actual enrollments in each grade are multiplied by their respective average survival rates and the results are the projected enrollments in each grade for the following year. For example, the five-year average survival rate for kindergarten to first grade (0.987) is multiplied by the students in kindergarten in 1997-98 (843) to obtain a projected enrollment of 832 in first grade for 1998-99.

There is one hole in the set of grade-level projections for the next year—kindergarten. The projection for a given grade level is based on the students in the previous grade. The entry grade into the school—kindergarten in this example—has no prior grade or students from which to derive its projected enrollment. Therefore, it is necessary to estimate the enrollment in the entry grade separately. A similar statistical projection technique can be employed by calculating a series of survival ratios for the number of kindergarten students in a given year to the number of live births in the district's catchment area five years before. The average of these ratios is multiplied by the number of live births four years ago (five years prior to next year's kindergarten class) to obtain a projection of the number of kindergarten students for the upcoming year. This initial estimate can be adjusted from enrollment information from preschool programs in the district, estimates of the in- or out-migration of families, and data on new housing developments.

Additional years' projections can be developed using the same procedure. The same survival rates are used, but the enrollments for the latest projected year become the starting point for the next year's projections. To continue the example, the 832 students projected in the first grade in 1998-99 would be multiplied by the first to second grade average survival rate (0.976) to obtain the estimate of 812 students in second grade in 1999-2000.

As with all extrapolation techniques, the cohort survival estimates become less secure the further out they are made. While the 1998-99 projections in the example are based on the actual enrollments in the prior year, the projections in later years are based on projected rather than actual enrollments. Further, it assumes the conditions that prevailed in past years will continue into the future.

Cautions. The results from any enrollment projection methodology—the cohort survival method, trend line analysis, or others—should not be automatically accepted as perfectly correct or accurate. Past conditions, such as annual survival rates, enrollment levels, or changes in enrollment levels, should be reviewed for deviations from the general grade level pattern. For example, in the cohort survival example, the third to fourth grade survival rate in 1996-97 was 1.039, the only rate in that group greater than 1.0. In every other of past five years, there was a loss of students from third to fourth grade.

An annual rate or enrollment level that seems out of line is not necessarily wrong, but it should be identified and possibly investigated to see if it was an aberrant condition or a normal difference. Since the annual survival rate average is used as the multiplier in the projections, an abnormal year will distort the average rate and hence the projected enrollments. The same is true for enrollment levels in calculating the trend line equation.

A final aspect to observe is enrollment pattern trends. A steadily increasing or decreasing rate of a grade level may indicate that last year's survival rate would be a more accurate indicator of next year's transition than the five-year average rate, which includes information different than expected future conditions. Where appropriate, the projection results can be modified to reflect the expected future situation more accurately. This may be necessary when districts are facing significant changes such as the end of a period of declining enrollments and the beginning of increasing enrollments. For example, nationally the decline in total high school enrollments bottomed out in 1990 and began increasing in the following year;[3] extrapolating from the preceding five years would indicate further declines and would miss both the number of students and the direction of change.

Personnel Projections

Personnel is the single most important and expensive resource used by schools. Consequently, it is crucial that the estimates of personnel required to operate the school district are as accurate as possible.

3. National Center for Educational Statistics, *The Condition of Education*, vol. 1 (Washington, DC: U.S. Government Printing Office, 1989), p. 109.

Staffing and Staffing Ratios

Personnel requirements are generally derived from enrollment estimates, since the number of students determines the need for personnel. This is particularly true in the instructional area. The general procedure is for the district to establish policies for student/personnel ratios for various instructional and support programs and to use these ratios to calculate the numbers of positions required in the upcoming years.

The ratios are critical to both the quality and costs of the educational programs. In some states, student/teacher ratios are established by state law or department of education guidelines. In some districts, staffing ratios or class sizes may be a component of a collective bargaining agreement. In districts that are not completely constrained by outside requirements, they are most frequently established by the school board as a policy decision. However, even in these cases the board usually acts with information and advice from school district administrators, instructional personnel, and even the public about the programmatic implications and estimated costs of their decisions.

Staffing ratios can be established for all types of programs in the school district, although some lend themselves to this approach more readily than others. For example, staffing ratios in the instructional area may be established for each major level of program (such as, elementary, middle, and high school) and type of student served (regular, handicapped, and bilingual). The number of students can also be used to specify support service personnel caseloads and classified positions. Table 4.1 gives some examples of district staffing ratios for instructional, support services, and classified personnel.

Composition of ratio. It is important to clarify which personnel are included in the staffing positions calculated by the ratios. For example, a single instructional staffing ratio could cover the total number of certified instructional and instructional support personnel in the school buildings (such as, classroom teachers, reading specialists, mathematics specialists, physical educational teachers, librarians, media specialists, music teachers, and counselors). Alternatively, separate ratios could be established for classroom teachers and for each type of instructional support personnel needed. The single ratio, which combines all teaching and instructional support staff, would be smaller (that is, fewer students per staff member) than a separate classroom teacher ratio. A single ratio for all instructional personnel gives the principal more flexibility in allocating positions within a school and allows schools to adapt to individual needs. It does, however, make it harder to explain to district patrons why the district has an average of 26 students per classroom when the instructional personnel ratio is 19:1.

Calculation of positions. Staffing ratios determine the number of personnel required in the upcoming year for each type of position. A district that has projected the number of next year's students can use this information along with

TABLE 4.1
Examples of District Staffing Ratios

Type Of Personnel	Student/Personnel Ratio
Certified Staff*	
Elementary	20.4:1
Middle School	19.5:1
High School	18.5:1
Classified Staff for Schools**	83.0:1
Health Services	
Nurses	1,700:1
Aide (6 hour)	0.5 Aide per Nurse
Handicapped Program	
Certified	23.5:1 (Yearly load)
Aide (8 hour)	50.0:1

* Includes staffing for regular classrooms; support areas of music, media, counseling, and physical education; and remedial services in reading and math.
** Includes secretaries, library aides, lunch aides, and classroom aides.

district staffing ratios to determine its instructional staff needs. Table 4.2 illustrates some of these calculations for a hypothetical school district. The district has a projected elementary school enrollment of 3,470 students and a staffing ratio of 20.4 students per instructional staff at the elementary-school level. Dividing the number of students by the staffing ratio yields 170 instructional staff positions that will be required next year in the district's elementary schools. Similar calculations are shown for other types of positions.

The district ratios can be used to set the overall district staffing limit and to determine the number of personnel to be assigned to an individual school. In the example shown in Table 4.2, the building staff for all elementary students in the district was calculated to be 170 teachers and 42 classified positions. This establishes the total number of instructional and classified staff to be allocated among all of the district's elementary schools.

Staffing flexibility. Assume, for example, that one of the elementary schools in this district expects to enroll 450 students. Using the district staffing ratios, it would be assigned 22 certified instructional positions (450 divided by 20.4) and 5 classified positions (450 divided by 83). Depending on district policy, the principal could decide how to allocate these positions among various class-

TABLE 4.2
Sample Staffing Needs Calculations

Position	Enrollment	Staffing Ratio	Staff Positions
Certified			
Elementary	3,470	20.4	170
Middle	2,040	19.5	105
High School	2,220	18.5	120
Total	7,730	395	
Classified			
Elementary	3,470	83.0	42
Middle	2,040	83.0	25
High School	2,220	83.0	27
Total	7,730		94
Health Services			
Nurses	7,730	1,700	5
Aides	7,730	3,400	2
Students With Disabilities			
Certified	680	23.5	29
Aides	680	50.0	14

room and support personnel in the school within certain district constraints. Constraints, for example, might require a full-time teacher assigned to every classroom, a maximum of 27 students per classroom, and at least a half-time librarian and a half-time physical education teacher in every elementary school. However, within this hypothetical allocation, it would be possible for School A to have a full-time physical education teacher, one librarian, a half-time music teacher, a full-time reading specialist, and a half-time math specialist to complement the 18 classroom teachers with an average of 25 students per classroom. School B might select a different combination of instructional personnel to meet its needs better, such as three additional classroom teachers to lower class sizes in crowded classrooms, but only a half-time physical education teacher, a half-time librarian, and no music teacher or specialists. The staffing comparison is illustrated in Table 4.3

Other allocation bases. Allocations of classified and custodial personnel to schools are sometimes calculated on different bases than certified personnel. For example, some districts use the number of students in a school to determine classified personnel allocations, but they are calculated in terms of hours-per-day of classified personnel time rather than in numbers of people. This allows school

TABLE 4.3
Examples of School Staffing Choices

	School A	School B
Students	450	450
Certified Positions		
Classroom Teachers	18	21
(Average Class Size)	(25.0)	(21.4)
Physical Education Teacher	1	0.5
Librarian	1	0.5
Music Teacher	0.5	-
Reading Specialist	1	-
Math Specialist	0.5	-
Total Certified Positions	22	22

administration flexibility in the types of personnel to hire and their working hours—for example, an eight hours-per-day secretary, six hours-per-day instructional aides, or two hours-per-day lunchroom aides. Custodial positions are frequently allocated to schools based on engineering standards, such as one custodian per so many square feet of building space to maintain. Adjustments to these standards may be made for special types of spaces—cafeterias, gyms, locker rooms, or auditoriums.

Adjustments for small and large schools. Sometimes staffing calculations yield poor results. This usually happens in either very small or very large schools because the staffing ratios are generally established for average-sized schools in the district. A small enrollment school may not generate sufficient staff to operate its programs adequately. This may be a rationale for considering closing the school and consolidating its students into larger schools where additional services can be provided. However, for geographical, logistical, or political reasons it may be necessary to continue operating the school. A common practice in this situation is to establish certain building or program minimum staffing levels that will be maintained regardless of the staffing ratio calculations. Examples of these minimums would be a full-time teacher in every elementary classroom, a half-time vice principal per middle school, or one full-time counselor per high school.

Large schools present the opposite problem—more staff positions are generated than necessary. This is primarily due to economies of scale, which are possible in some areas. The correction is the reverse of that for small schools: the

TABLE 4.4

Allocation of Librarian Positions by School Size

School Enrollments			Librarian Positions Allocated
From		*To*	
250	-	400	0.5
400	-	800	1.0
800	-	1,400	1.5
1,400	-	2,000	2.0
More than 2,000			2.5

calculated number of positions for the building is adjusted downward to reflect an adequate staffing level.

Both the minimum and maximum levels are established through professional judgment combined with educational and fiscal considerations. If a district has both small and large schools of the same type, it has the opportunity to balance the additional staff for small schools with the staff savings from the large schools. Otherwise, the extra personnel in the small schools must be provided in addition to overall positions calculated for the district.

Ranges rather than ratios. Another way of allocating certain staff positions to schools is based on ranges of students rather than specific enrollment numbers and fixed staffing ratios. For example, librarian positions could be allocated to schools in 0.5 FTE increments, which increase with school size. A hypothetical staffing arrangement is shown in Table 4.4. Here the minimum staffing for the smallest schools is a half-time (0.5 FTE) librarian. As the school gets bigger, it qualifies for additional librarian positions according the specified enrollment ranges. Note that in Table 4.4 expected economies of scale are built into the staffing schedule. Other examples of positions that might use this allocation procedure include vice principals, counselors, and reading specialists.

District office staffing. Determining central office positions—both certified and classified—is generally less standardized than those at the building level are. The type and number of positions depend on the size of the district, the organizational structure of the central office, the scope of the work expected, and the volume of work for which the district office is responsible. It may be possible to compare the numbers for certain positions—administrators, supervisors, secretaries—with national ratios. However, to achieve a comprehensive estimate of the numbers and types needed, one must study the tasks and activities required from the district office. This is best done on a department by department basis since the work is usually organized this way.

Several interconnected steps can be used to obtain the appropriate staffing patterns in the district office. First, reviewing the positions historically will provide information about the number and types of positions filled in each district-level department. Reviewing the adequacy of the current staffing is a useful second step. This can be done through formal and informal observations by district administrator and through discussions with district staff at all levels. Ultimately, the decision involves management judgment based on the benefits and costs of maintaining or increasing the number of positions, versus the cost savings and potential problems caused by a reduction in available staff.

Expenditure Estimates

Expenditure Estimation Approach

Many different parts of the district organization are responsible for developing sections of the budget. The personnel office and the business office develop a great deal of budget-related information used by others in the district. They also make personnel and cost projections for activities and operations related to the total district. Individual schools or district-level departments are responsible for developing budget estimates for certain parts of their activities. It is essential that everyone uses the same planning assumptions and budgeting rules throughout the district so that all the pieces fit together. This requires a consistent set of procedures within an overall approach that directs the expenditure estimation efforts. The objective is to prepare complete, appropriate, and understandable expenditure estimates for the school district's budget.

The vehicle for establishing and maintaining this consistency is the state accounting system. Budget estimates are made in accord with the school accounting system's program structure. The general approach is to work within the lowest level function used by the district, to identify the objects of expenditures required to support the function's activities, and then to estimate the costs for each of the objects.

The overall procedures for estimating expenditures are shown in the three steps below. The steps are general, but provide a structure for understanding the purpose and context of the specific expenditure estimations.

1. *Identify the programs and functions to be used in the budget.* This step specifies the particular programs or functions around which the budget will be built. The school accounting system provides the framework to designate the functions.
2. *Determine the types and quantities of resources needed to carry out the tasks in each program or function.* These are the items that will be employed or purchased by the school district. The resources to be specified are determined by the

objects of expenditure listed in the district's accounting system. Not every type of object of expenditure will be used in every program, so only those items actually needed should be specified. The actual determination of resources is done in a variety of ways, including policies, standards, formulas, and historical relationships.

3. *Estimate costs of each program or function.* This last step involves putting prices on the resources and summing up the total costs for each program first within schools and district-level departments, next by major function, and then for the entire district.

Format for Estimating Expenditures

The building block of school district budgets is *the Cost Center.* This is the organizational unit where the expenditures will take place. Common cost centers are each school building and district-level department. This allows—or requires—each cost center, such as a school, to develop its own budget request. These budget requests are collated by major function to arrive at a budget for the entire district.

The format for estimating expenditures within a cost center follows the same classification structure used by the school district. Budget requests are established for each major program or function by estimating expenditures for the actual objects to be purchased.

The function and object levels at which the estimates are made are often established by state regulations, but districts may develop estimates at lower levels of detail and aggregate them up to the required levels. This permits districts to generate additional information for internal planning and control purposes. An example illustrating the levels of expenditure estimates in a high school budget is given in Table 4.5.

The hypothetical cost center in this illustration is Lincoln High School, whose budget estimates contain several different function/program combinations and subfunctions, such as Instruction/Regular/Secondary, Guidance, Educational Media, and Office of the Principal. These third-level functions (third digit in the function/program code) are the assumed level to which state regulations mandate expenditure estimates. For district-wide planning and reporting purposes, all of the instructional costs for high schools can be aggregated into the Instruction/Regular/Secondary category. Within Lincoln High School, the instructional expenditures are estimated for each major department or subject matter area, such as English Language Arts, Mathematics, Natural Science, and Social Studies. In this example, the subject matter is the lowest level used in the budget. Within each of these areas, the budget identifies anticipated objects of expenditure and gives the estimated costs for each category. Similar estimates are made for noninstructional subfunctions within all high school support services and administrative functions.

TABLE 4.5

Examples of Budget Levels for Expenditure Estimates

Cost Center (District Optional)		Function/Program/Level (State Required)		Subject Matter (District Optional)		Object of Expenditure (State Required)		Costs
Code	**Description**	**Code**	**Description**	**Code**	**Description**	**Code**	**Description**	**Amount**
061	Lincoln High School	1130	Instruction Regular Secondary	05	English Language Arts	110	Regular Salaries	$697,300
						210	Group Insurance	230,100
						530	Communications	3,700
						610	General Supplies	36,600
						640	Books & Periodicals	98,100
						730	Equipment	55,800
							Total	$1,121,600
				11	Mathematics			
				13	Natural Science	(Each subject matter department and support and administrative function would have its Objects of Expenditure specified, similar to English Language Arts above.)		
				15	Social Science			
		2120	Guidance Services	2122	Counseling Services			
		2220	Educational Media	2222	School Library			
		2410	Office of Principal					

Estimating Salary Expenditures

Salaries for personnel are the most important cost object in the school district's budget. Typically, 65 percent of the total budget is for salaries.[4] The salary levels for teachers, other certified personnel, and classified personnel are generally established through collective bargaining negotiations between the district and representative associations or unions. These negotiated agreements act as constraints on the budget and provide the information to develop salary cost estimates.

Salaries are the amounts paid to permanent and temporary personnel on the district's payroll (employees of the district). There are many different kinds of salary costs to be considered in the budget. Salaries are categorized as regular, temporary, overtime, or sabbatical leave.

Code	Description
110	**Salaries of Regular Employees.** Full-time, part-time, or prorated portions of the costs for work performed by permanent employees of the district.
120	**Salaries of Temporary Employees.** Full-time, part-time, or prorated portions of the costs for work performed by employees of the district who are hired on a temporary or substitute basis.
130	**Salaries for Overtime.** Amounts paid to employees of the district in either temporary or permanent positions for work performed in addition to the normal work period for which the employee is compensated under regular salaries or temporary salaries.
140	**Salaries for Sabbatical Leave.** Amounts paid by the district to employees on sabbatical leave.

Within each of these categories, some state accounting systems further subdivide salary expenditures into amounts for certified and noncertified (or classified) personnel. Separate estimates can be made for each object subcategory for which salary expenditures are anticipated during the upcoming year.

Teacher salaries. Most school districts use *a single salary schedule* for determining teacher and other certified salaries. An example of such a salary schedule is shown in Table 4.6.

The salary schedule is a matrix with years of experience as one axis and educational level as the other. The amount in each cell in the matrix specifies the salary for an individual with a specific level of experience and education. For example, a teacher with eight years of experience and a Master's degree would receive $55,000 under the schedule in Table 4.6.

4. Nancy Protheroe, "Local School Budget Profiles Study," *School Business Affairs* Vol. 62, no. 9 (September 1996), p. 48.

TABLE 4.6

Salary Schedule for Certified Professional Personnel

Years	Step	Bachelors	Bachelors + 15 Credits $1,000	Masters $2,000	Masters + 30 Credits $2,000	Doctorate $3,000
1	1	$38,000	$39,000	$41,000	$43,000	$46,000
2	2	$40,000	$41,000	$43,000	$45,000	$48,000
3	3	$42,000	$43,000	$45,000	$47,000	$50,000
4	4	$44,000	$45,000	$47,000	$49,000	$52,000
5	5	$46,000	$47,000	$49,000	$51,000	$54,000
6	6	$48,000	$49,000	$51,000	$53,000	$56,000
7	7	$50,000	$51,000	$53,000	$55,000	$58,000
8	8	$52,000	$53,000	$55,000	$57,000	$60,000
9	9	$54,000	$55,000	$57,000	$59,000	$62,000
10-11	10	$56,000	$57,000	$59,000	$61,000	$64,000
12-13	11	$58,000	$59,000	$61,000	$63,000	$66,000
14-15	12	$60,000	$61,000	$63,000	$65,000	$68,000
16-17	13			$65,000	$67,000	$70,000
18-19	14			$67,000	$69,000	$72,000
20+	15			$69,000	$71,000	$74,000
Step Increase		$2,000				

Salary schedules are constructed to provide financial incentives for teachers to remain with the district for a number of years and to continue their professional development through additional education. As teachers gain experience, they move down the salary schedule. Each step downward up to a maximum number of years brings a higher salary level as experience increments are added to the previous year's salary. In the example schedule, for the first nine years, each additional year advances the teacher one step down the schedule and raises the salary by $2,000. For the next 10 years, two years are spent on each step. Finally, after 20 years, the maximum step is reached and no further step advances are possible. Similarly, as teachers obtain additional educational credits or degrees, they move to the right in the matrix, and each further educational level reached brings an additional salary increment, which may vary by level.

Most salary schedules are designed with an approximate 2:1 ratio between the highest and lowest salaries. In the example shown in Table 4.6, teachers who have worked for the district for 20 years (Step 15) and have a doctorate would earn approximately twice as much as a beginning teacher with a bachelor's degree.

Another interesting feature of this example salary schedule illustrates an important district personnel policy. The district has placed a limit of 15 years on the experience increases for those teachers with only a bachelor's degree. This means that the maximum salary for teachers with a bachelor's degree is capped at the amount for step 12 regardless of their actual experience beyond that level. This feature, coupled with the educational level increments, which increase with educational level, provides an incentive for teachers to continue their education since moving across the matrix offers the only possibility of a salary increase on the scale.

There are many different types of salary schedules used by school districts.[5] Some, as in Table 4.6, involve a dollar increment between steps. Others use a percentage amount between steps with the base for calculating the percentage being the salary for beginning teacher with lowest education level (upper left hand corner of the salary matrix) or some other point on the schedule (e.g., master's at the maximum step). An "index" schedule is one in which the beginning salary on the schedule is picked as the index point and all other salary amounts are calculated as an index value (e.g., 1.500) times the base salary. A "reverse index" schedule is similar, except that the index salary is usually the master's at the maximum step.

In practice, actual district salary schedules may not be as neat and logical as the ideal examples described above. Due to past events, increments may not be the same between all steps or may vary from step to step throughout the schedule; amounts for education levels can be different, usually with greater amounts for higher education levels.

There is no correct type of salary schedule. Districts can establish a schedule with whatever features can be negotiated with their teachers' union. Influences on the composition of a district's salary schedule can include historical precedent, past negotiated agreements, schedules from neighboring districts or districts of similar characteristics in the state, demographic composition of the teaching staff and the union's negotiating team, as well as fiscal constraints of the district. Changes to the structure of the salary schedule should be carefully analyzed for their impact on individuals and their cost to the district, both currently and throughout the duration of a salary contract.

Salary expenditure projections are developed by the district office since they maintain the necessary personnel records and are generally responsible for contract negotiations. Estimates for teacher and other certified personnel salary costs begin with an update of the salary amounts in the schedule. The procedure used will vary with the conditions and timing of the contract with the teachers' association or union. If the district is in an interim year of a multi-year contract, then the annual increase can be closely estimated based on the salary schedule for

5. For a discussion of salary schedules, see William Hartman and Seldon Whitaker, Jr., "An Analytical Model for Negotiating Teacher Salary Schedules," *Journal of Collective Negotiations* 20(1)(1991), pp. 69-88.

the upcoming year. Frequently, this will involve a fixed dollar or percentage amount per teacher, perhaps tied to an economic indicator, such as a regional or state consumer price index (CPI). Once the indicator is determined or estimated, it is used to update the salary costs for the upcoming year.

In years when the district is scheduled to negotiate a new contract that will not be signed prior to the budget process, anticipated increases in the salary schedule must be estimated and incorporated into the budget calculations. Unfortunately, this has serious overtones in collective bargaining negotiations since budget documents are generally available to the public (including union negotiators), and knowledge of what the district has budgeted for salary increases can strengthen the union's bargaining position. Consequently, some districts exclude salary increases from this portion of the budget, use the current year's salary schedule as a preliminary estimate of next year's salaries, and place the estimated settlement amount for salary increases into an unspecified contingency account (or accounts) to disguise their negotiation strategy. In any event, a first step in developing salary expenditure estimates is to update the salary schedule for the upcoming year.

The next step is to project the number of personnel at each salary level in the schedule for the next year. The salary schedule format can also be used for the personnel schedule, with years of experience and educational level again as the dimensions, and the number of people at each particular experience/education combination in the respective cells of the matrix. Using this format, the number of people currently in each cell of the matrix is determined—the present location matrix. These numbers are then adjusted by 1) eliminating any persons who will be retiring, moving, resigning, or going on leave; 2) adding any persons expected to be returning to the district payroll next year; 3) advancing those remaining in the matrix by one year in experience; 4) estimating the number of those who will qualify for a higher educational level next year, usually based on historical records; and 5) estimating who will be entering the district next year and their placement in the matrix, at the initial cell or elsewhere. The resultant matrix provides an estimate of the numbers of persons to be employed according to their salary category.

A shortcut for districts with fairly stable enrollments and personnel requirements is to advance all eligible teachers currently in the district one year in experience (taking care not to advance those already at the maximum experience level). This procedure generally overestimates total salary costs somewhat since retiring teachers at the higher end of the salary schedule will likely be replaced by new teachers at lower salary levels. This approach assumes the additional costs due to advances in educational levels will be balanced by lower costs of replacing senior teachers with junior ones. Alternatively, educational level increases can be budgeted for by estimating a lump sum amount—usually based on historical experience— to cover the cost of these increments, rather than trying to estimate them more precisely.

The projected number of teachers at each point on the salary schedule is multiplied by the corresponding amounts in the updated salary schedule. Overall salary expenditure estimates for instructional personnel are then obtained by summing the results of each calculation. These estimates can be developed for the total number of teachers in the district or for any subgroup. For example, to obtain separate salary estimates for elementary, middle, and high school instructional personnel, the district would simply use the number of teachers in each group and carry out the calculations using the same salary schedule. The short cut method of advancing present personnel is demonstrated in Figure 4.4 using the data in the master's columns.

The salary impact on individual teachers from one year to the next can also be traced in Figure 4.4. Most teachers will receive a double increase: 1) from an overall increase in the district's salary schedule, and 2) from advancing to the next step on the schedule. A third increase is possible if the teacher completes another educational level. For example, a teacher with a master's on Step 1 in the current year ($41,000) will be on Step 2 next year ($44,000). The $3,000 increase is due to 1) an overall salary schedule increase of $1,000 per cell (difference between Step 2 amounts from current year to next year), and 2) a step increase of $2,000 (difference between steps 1 and 2 in a given year.

Administrative salaries. Salary costs must also be estimated for administrators. Examples of such positions are school principals and assistant principals, curriculum coordinators, central office directors, administrators, and coordinators. Although they occupy professional positions and are frequently certified, they are noninstructional personnel and their salaries are usually not determined by the teachers' single salary schedule.

Instead, for most administrative positions salary amounts are established by a separate schedule. Each administrative position is located within a category or salary range that contains similar positions. Within each range there are usually several levels corresponding to years of experience in the position. Higher levels receive higher salaries. There are usually fewer experience levels for administrative personnel than for teachers, which limits the salary growth possible for administrators within a given position range. Unlike the teachers' salary schedule, the administrators' schedule generally contains no salary increments for educational level. An example of an administrative salary schedule is given in Table 4.7.

The administrative salary schedule is also updated annually, often on a percentage basis, and sometimes linked to the teacher salary schedule. The new amounts are used in estimating administrative costs for the upcoming year. To calculate the projected administrative costs for a given function, the number of administrative positions at each range and level are specified. These position counts are multiplied by the corresponding salary amounts from the administrative salary schedule and the results are summed.

FIGURE 4.4

Sample Calculations of Teacher Salary Expenditures

Current Year Salary Schedule

Step	BA	BA+15	MA	MA+30	Doc
1			41,000		
2			43,000		
3			45,000		
4			47,000		
5			49,000		
6			51,000		
7			53,000		
8			55,000		
9			57,000		
10			59,000		
11			61,000		
12			63,000		
13			65,000		
14			67,000		
15			69,000		

x

Current Year Personnel Schedule

Step	BA	BA+15	MA	MA+30	Doc	Total
1			5			
2			4			
3			3			
4			2			
5			1			
6			1			
7			2			
8			3			
9			4			
10			5			
11			6			
12			7			
13			8			
14			9			
15			10			
Total			70			

=

Current Year Salary Expenditures

Step	BA	BA+15	MA	MA+30	Doc	Total
1			205,000			
2			172,000			
3			135,000			
4			94,000			
5			49,000			
6			51,000			
7			106,000			
8			165,000			
9			228,000			
10			295,000			
11			366,000			
12			441,000			
13			520,000			
14			603,000			
15			690,000			
Total			4,120,000			

Next Year Salary Schedule

Step	BA	BA+15	MA	MA+30	Doc
1			42,000		
2			44,000		
3			46,000		
4			48,000		
5			50,000		
6			52,000		
7			54,000		
8			56,000		
9			58,000		
10			60,000		
11			62,000		
12			64,000		
13			66,000		
14			68,000		
15			70,000		

x

Next Year Personnel Schedule

Step	BA	BA+15	MA	MA+30	Doc	Total
1			0			
2			5			
3			4			
4			3			
5			2			
6			1			
7			1			
8			2			
9			3			
10			4			
11			5			
12			6			
13			7			
14			8			
15			19			
Total			70			

=

Next Year Salary Expenditures

Step	BA	BA+15	MA	MA+30	Doc	Total
1			0			
2			220,000			
3			184,000			
4			144,000			
5			100,000			
6			52,000			
7			54,000			
8			112,000			
9			174,000			
10			240,000			
11			310,000			
12			384,000			
13			462,000			
14			544,000			
15			1,330,000			
Total			4,310,000			

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TABLE 4.7

Administrative Salary Schedule

	Low	Mid-point	High
RANGE I	*Senior High Principals, Business Administrator, Personnel Administrator, Educational Services Administrator*		
	$64,450	$80,080	$95,700
RANGE II	*Middle School Principals*		
	$62,440	$77,580	$92,720
RANGE III	*Elementary School Principals*		
	$60,440	$75,090	$89,740
RANGE IV	*Curriculum Coordinators, Media Services Director, Special Education Director, Physical Plant Director, Food Services Director, Director of Accounting, Senior High Assistant Principals*		
	$56,380	$70,050	$83,720
RANGE V	*Elementary and Middle School Assistant Principals, Athletic Director*		
	$54,370	$67,560	$80,740

For a few upper level administrative positions, such as superintendent, the salary amount may be established on an individual basis outside of the administrative salary schedule. In these cases, the salary projections are determined directly from the employment contracts for those positions, adjusted for any annual increases.

Supervisor salaries. Separate salary schedules are also sometimes established for supervisors of classified personnel. This group would include personnel who manage such functions as maintenance and plant operations, buildings, grounds, district shops, painting, printing, electronics, mechanical services, transportation, and custodial services. These positions do not usually require an administrative certificate or other educational qualification. Persons in these positions generally supervise the activities of skilled and semi-skilled classified employees.

The salary schedule for supervisors is similar to that of administrators. Positions that are believed to be equivalent are grouped together in a single range. Within each such range there are several levels representing years of service in that position. The salary amount increases as a person moves to a higher range or moves to a higher level within a given range. Typically, there are more levels in the supervisors' salary schedule than in the administrative schedule; this allows for more salary growth for supervisors within a particular position.

TABLE 4.8

Classified Staff Salary Schedule—Hourly Wage

Years	Step	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7
1	1	$9.06	$9.37	$9.66	$9.97	$10.42	$10.84	$11.27
2-5	2	$9.37	$9.66	$9.97	$10.28	$10.72	$11.16	$11.58
6-10	3	$9.66	$9.97	$10.28	$10.59	$11.02	$11.47	$11.89
11-15	4	$10.28	$10.59	$10.90	$11.21	$11.64	$12.06	$12.51
16-20	5	$11.32	$11.21	$11.52	$11.83	$12.26	$12.68	$13.13
21+	6	$11.58	$11.89	$12.20	$12.51	$12.94	$13.36	$13.80

Night Shift Differential: $0.25/hour
Substitutes: Level for Job @ Step 1

Salary expenditures for supervisory personnel are estimated in much the same way as administrators. First, it is necessary to identify that a position is supervisory and then to find the range on the schedule containing the position. Next, the incumbent or person who is expected to hold the position next year is identified to determine the level or years of service. This locates the exact placement on the salary schedule and gives the salary expenditure amount to be budgeted for next year.

Classified salaries. Salary expenditures must also be estimated for classified personnel. Examples of classified positions include clerical and secretarial workers; custodians; food service workers; maintenance craftsmen, technicians, and specialists; instructional aides; bus drivers; transportation technicians, mechanics, and specialists; and a variety of specialized positions which do not require a certificate for employment.

These classified positions represent a wide variety of skills and abilities needed by the school district. They also represent a wide compensation range the school district must meet to be competitive in the local labor market. To accommodate the diverse compensation range for this group of employees, district salary schedules incorporate different grades or levels that are related to job classification; more skilled or competitive positions are rated at higher job levels paying higher wages. Often districts establish separate salary schedules for similar groups of classified employees to align pay scales more closely with job classification. Salary schedules for classified personnel reflect the manner in which those positions are paid—hourly, monthly, or an annual contract based on days, months, or annually. The schedules can also incorporate experience increases (steps) into the salary amounts for employees who continue employment with the district. Generally, the experience increments for classified positions reach a maximum sooner than for

teachers. As an example, a uniform salary schedule for classified personnel is shown in Table 4.8.

This general schedule would provide the basis for compensation for all classified positions in the district. The schedule contains the wage amounts for each level and appropriate experience step. Since it is based on an hourly wage rate, the schedule accommodates classified positions with different workdays (e.g., 6-hour instructional aide, and 8-hour custodian). To use the schedule, all classified positions would be identified and rated according to level (e.g., Secretary-Level 2, Secretary-Level 3). The hourly wage amount would then be determined by the level and step (years of experience).

The same approach is used to estimate salary costs for classified positions as other types of personnel. The number of persons expected in each level of the classified salary schedule is estimated. These numbers are multiplied by the appropriate wage amounts (i.e., $/hour x hours/day x days/year) to arrive at an overall salary cost estimate for this group. Determining classified salary costs for individual cost centers is accomplished by calculating actual salaries of individuals assigned to each center.

Position counts versus salary amounts. In working with their cost center budgets, school-level administrators and district-level department heads generally deal only in position counts, usually expressed in *full-time equivalent* positions (FTE). They allocate the available positions among the instructional and support areas in accord with district policies, but do not have to be concerned with the salary costs of individual teachers, other professionals, administrators, supervisors, or classified personnel. The salary cost figures are put into each cost center's budget by the district office based on the actual salaries of the particular personnel working in that center. If desired, salary costs can also be identified for each instructional department within a school through the same procedure.

At the school level, working with only position counts eliminates the cost disparities among different school programs caused by seniority of staff assigned the programs. This procedure permits the principal to allocate staff based on instructional skills and expertise rather than on cost considerations. The same is true for assignments for administrative, supervisory, and classified personnel.

Additional salary expenditures. All of the salary expenditures discussed above were for *regular* salaries. As noted previously, other types of salary expenditures must also be considered in constructing a school district budget. The most common of these are *temporary* salaries, *overtime* salaries, and *sabbatical leave*. Within each classification are a number of different possible types of salary expenditures a district may wish or need to include in the budget. Further, different rules, procedures, and contract provisions frequently govern the amounts to be budgeted for certified and classified personnel.

For certified personnel, the two types of *temporary* salaries most commonly included in school district budgets are:

1. Pay for substitutes for instructional staff;
2. Salaries for hiring instructional personnel on a short-term basis.

The purpose of the substitute costs is to replace a teacher who is not in the classroom, whether planned or unplanned. Examples include substitutes for teachers who are sick, released for other duties, given professional leave, or otherwise absent from the classroom. The second type of temporary expenditure allows schools to increase the professional staff for a brief period to meet a need. An example is hiring a teacher to serve as a long-term substitute for a permanent teacher on maternity leave.

Two common methods of estimating the amounts for temporary certified salaries in the budget are current amount and number of days calculation. Both are based on historical trends and patterns, but adjusted for changes in pay scales and operating patterns in the budget year. Of the two, use of the current expenditure amount is the simplest as it uses existing data; however, the previously budgeted amount should be compared with actual operation results and any necessary adjustments made to reflect expected expenditures. Alternatively, the district personnel office can determine the average number of substitute days required per classroom teacher over the past several years and multiply this number by the projected daily substitute rate to reach the budget estimate. This procedure requires the additional step of reviewing and extracting the necessary data from relevant personnel records.

The need for certified personnel hired on a short-term temporary basis can be estimated from the individual school's instructional plans or operating plans of district-level departments. Cost projections are developed from information specifying the number of temporary positions for teachers or other professionals, which are planned and the amounts in the short-term contracts.

Overtime expenditures for certified personnel include a variety of additional assignments given to the professional staff. Examples of such activities are extended contracts for teachers to work in the summer on curriculum development, salary increments for school department heads or curriculum coordinators, and extra duty pay for coaching or supervising other after school activities. Budget estimates for these items will vary with the type of activity, but generally involve an established contract amount, either as a dollar amount, a percentage of salary, or an hourly rate times an estimated number of hours.

Costs for sabbatical leave for certified personnel are estimated by establishing the number of staff to be granted sabbatical leave for the upcoming year and the amount of pay that each will receive during that time. This involves taking the full or partial salary of each person on sabbatical depending on the length of leave

and the district's policy for sabbatical leave payments. Costs to replace personnel on sabbatical leave can be budgeted in regular salaries to make the instructional salary costs comparable from year to year. Amounts used for replacing persons on sabbatical leave are usually based on starting salary levels.

Similar to the certified personnel, the other salary costs for classified personnel include both temporary and overtime expenditures. The temporary salary costs purchase substitute personnel for classified positions that must be filled daily even if the regular staff member is absent. Examples include teacher aides, cooks, or bus drivers. Overtime salaries are to pay for additional work done by regular district classified employees. Estimates for these costs are generally developed by school and district-level department administrators and are based on the type and amount of work that is required.

There are two primary methods to calculate these salary costs. The first adjusts the current dollar amount budgeted for historical patterns or trends and for salary and wage changes anticipated next year. The second uses an estimate of the time required, adjusted for any expected workload differences or pattern in the upcoming year and for changes in daily or hourly rates for classified personnel. These other salary expenditures are frequently viewed as additional costs beyond the basic operating costs and often receive closer scrutiny from the district office.

Employee Benefits

Employee benefits are additional employee-related costs that have to be paid by the school district on behalf of their employees. They are not salaries, although they are a personnel-related expenditure. Estimating these expenditures requires separate calculations from salary expenditures. Further, expenditures for employee benefits are shown in a separate object of expenditure category in the budget.

For the most part, these benefits are not paid directly to employees, but are paid to other agencies or organizations that then provide certain services, benefits, or compensation to the employees. Some of these expenditures, such as Social Security and Workmen's Compensation, are mandated by state or federal statutes or regulations. Other employee benefit expenditures for the district, such as contributions to employee retirement or health and life insurance premiums, are agreed upon as part of an individual or union employment contract. In the accounting structure used by the district, each required employee benefit should be identified as a subcategory of the main employee benefits object of expenditure. The benefits are shown individually in the budget within the function and cost center where the related salary expenditure is incurred. Note that costs of each type of benefit (e.g., Social Security) are aggregated together from all employees; benefit costs by type of employee are not shown separately as they can be with salary costs.

TABLE 4.9
Employee Benefits

Type of Benefit	Amount	Period
Medical Insurance		
Gross Amount	$300.00	Month
Co-payment	$60.00	Month
District Cost	$240.00	Month
Months	12	
Annual Cost	$2,880.00	Annual
Dental Insurance		
Gross Amount	$70.00	Month
Co-payment	$14.00	Month
District Cost	$56.00	Month
Months	12	
Annual Cost	$672.00	Annual
Life Insurance		
Gross Amount	$100.00	Annual
Income Protection		
% of Salary	0.30%	Month
Social Security		
% of Salary	7.65%	Annual
Retirement Contributions		
% of Salary	11.75%	Annual
(Regular, Overtime, & Sabbatical salaries only)		
Unemployment Compensation		
% of Salary	0.15%	Annual
Workmen's Compensation		
% of Salary	1.15%	Annual

Generally, the employee benefit amounts the district needs to budget are related to the employee salaries. However, the relationship will change depending on the type of benefit, the type of employee, and the amount of time a person works.

The two principal means of estimating employee benefits are 1) as a percentage of gross salary or 2) as a fixed dollar amount. The method used depends upon the particular benefit being estimated. For example, benefits such as

Social Security, Unemployment Insurance, Workmen's Compensation, and retirement contributions are usually based on a percentage of an employee's salary, sometimes limited by a maximum contribution amount. Medical, dental, and life insurance expenditures are frequently estimated as dollar amounts per employee. An illustration of the types of employee benefits paid by a school district along with the percentages or amounts used to calculate them is shown in Table 4.9.

For the percentage-based expenditures, estimates depend on which benefits apply to which types of salaries. For example, retirement contributions may be made for only regular and overtime salaries; persons employed on a temporary basis may not be eligible to receive retirement contributions. The next step is to establish the rate for each of the benefit types. Some of the percentages will be known in advance, such as Social Security or retirement contributions. Others may have to be estimated from past experience adjusted for expected future conditions, or from estimates obtained from the outside agencies. The final step is to apply the percentages to the appropriate salary amounts. These calculations have to be done for each individual employed by the school district and the results summed to obtain the total for the district.

For employee benefits calculated on a dollar amount per person, the steps are similar, but the information is modified to account for the different calculation basis. The types of benefits are identified along with their applicable positions. Next, the dollar amount per person for each benefit is estimated or obtained from a contracted vendor or provider. The cost to provide each type of benefit varies based on the individual's position and choice of plan, such as medical and vision insurance. It is also necessary to determine the number of individuals for whom each benefit applies. This number is frequently different from the FTE counts used in salary calculations because the benefits can apply to each individual working over a specified amount of time, often half-time (0.50 FTE) or more. This means that four teachers working at three-quarter's time each (0.75 FTE) would be counted as four individuals in calculating some employee benefit amounts, not as the 3.0 instructional FTE they represent. The last step is to multiply the number of persons eligible for a given benefit by the estimated dollar amount per person to obtain the projected expenditure.

Purchased Services

Purchased services are expenditures for personnel services or other items obtained from individuals or organizations that are not employed by the school district. They are for services purchased from outsiders not on the district payroll. The types of purchased services in district budgets are outlined in the Object dimension of the accounting system (Table 3.4). Frequently used examples include professional and technical services (school election services, tax collection, educational consultants and services, physicians, lawyers, auditors, therapists, negotia-

tors); property services (utilities, cleaning, repairs and maintenance, rentals); other purchased services (student transportation, insurance, communication, advertising, printing, tuition, and travel).

With the wide variety of purchased services, there are many different ways of estimating the expenditures to be budgeted for these items. In some cases, district guidelines stipulate the amount to be budgeted. In others, the most appropriate method may be the recent historical pattern adjusted for any anticipated inflation. For items with a stable expenditure pattern or for which significantly different levels of activity are expected, other approaches are necessary. Among the options are obtaining price quotations from possible suppliers or costing out the item by estimating the expected level of activity, the resources required, and the cost of those resources.

Supplies

Another important expenditure category is supplies. Due to the wide range of items classified in this category, it is useful to subcategorize supply items in the budget. The most common groupings include *general supplies* (a comprehensive account for all supplies for the operation of the district that are not otherwise specified); *energy*; and *books and periodicals* (e.g., textbooks, workbooks, library books, reference books, magazines, professional journals, book binding and repairs). Within each of these areas, it is possible to detail the type of supplies by cross-classifying with the function/subfunction, program, level of operation, or subject matter area in which the supplies are to be used (e.g., audio-visual supplies, supplies for physically handicapped programs, elementary supplies, or mathematics, music, or science supplies). This is particularly useful when allocating supply amounts within schools or district cost centers.

A common approach to budgeting for instructional supplies is to use a lump sum amount, usually dollars per pupil, to estimate the necessary expenditures in the upcoming year for each school in the district. In this method, the district office establishes an appropriate dollar per pupil amount to be allocated to each school. This is an important step, as it determines the amount of money teachers will have available for purchasing instructional supply items. Setting the dollar per pupil amount is not a scientific process, although it can be helpful to maintain and analyze supply expenditure records. The final amount is often a compromise between educational desires and fiscal reality, and both aspects should be considered. The easiest place to begin is the per pupil amount for the current year. This amount can be reviewed with instructional personnel to evaluate its adequacy, and supply expenditures for the last several years can be examined to identify areas of inadequate funds or underspending. If there appear to be serious problems with the allocation, then adjustments in the per pupil amounts can be considered. A common adjustment is increasing the budget to reflect the rising cost of supplies.

The amount available for supplies is calculated by multiplying the dollar per pupil amount by the number of students projected for next year.

The supplies and materials amount per pupil can be the same for all pupils in the district, or it can vary with the type of school. Usually high schools qualify for the greatest amount per pupil followed by middle schools and then elementary schools. An example of such amounts is shown below.

Elementary Schools (K-Grade-5)	$139.00/pupil
Middle Schools (Grades 6-8)	$207.00/pupil
High Schools (Grades 9-12)	$231.00 /pupil

A variation on the single lump sum per pupil allocation is an allocation to schools based on separate amounts per pupil for specific supply categories. In this approach, dollar per pupil amounts are established for each of the supply subcategories used by the schools. The school then receives a series of allocations based on the various supply subcategories. If the school also has authority to shift money from one subcategory to another, then this approach functions much like the single-lump sum allocation. It does, however, provide a more detailed record of where supply expenditures were incurred.

The amount of money for supplies available to an individual school under this system is the dollar per pupil amount times the number of students estimated to be enrolled next year. In the example of the dollar per pupil supply allocation above, a high school with an estimated enrollment of 1,500 students for next year would receive a budget allocation of $346,500 for supplies and materials for the upcoming year ($231.00 per student x 1,500 students).

There may be instances when the dollar per pupil allocation for supplies does not result in an adequate amount for certain schools; two reasons for this can be small school size or greater student learning needs. Schools with very small enrollments may not generate sufficient supply monies to cover their basic needs since the dollar per pupil amounts are normally established assuming an average-sized school. In this case, another approach is to establish a base or minimum dollar amount per school for supply and material items required for the basic operations of a school regardless of its size. These amounts can be determined by multiplying the standard dollar per pupil amount by a minimum enrollment figure for the type of school. Schools with enrollments below minimum levels would receive the base dollar allocation even though they otherwise would not generate this amount. Larger schools would automatically generate more than the minimum funding level. .

In the case of additional student learning needs, the district can allocate additional funds—often from state or federal categorical aid monies—to these schools to meet the more difficult educational task that they face. To minimize controversy over unequal treatment, these allocations can be made on a criterion

believed to be related to student learning needs (e.g., percentage of students from low income families).

Once the supply and materials allocations have been made to the schools, it is then the responsibility of the principal and staff to decide on the amounts to be allocated to each instructional department, support area, and administrative activity within the school. Their flexibility in this process is constrained by the district guidelines on transferring money among different allocation accounts. The internal school procedures for doing this range from an assignment of dollar amounts by the principal to a participatory decision making process involving faculty, administrators, and classified staff.[6] Once these internal allocations are determined, the school reports them to the district office for incorporation into the district budget document.

Property

Property expenditures are made for acquiring fixed assets for the district. These are generally more costly items such as land, buildings, and equipment. There is a wide range in the types of property items a school district might consider. Some of the items purchased represent a continuation of commitments to existing programs and activities, while others are required for the addition of new programs or approaches. Consequently, while the number of property items in a district's budget may be relatively small, it is not uncommon for these items to receive a great deal of attention from the school and district-level administration, the school board, and even the public.

Purchases of land or buildings are very large dollar expenditures, but occur relatively infrequently for most school districts. These items may require special financing arrangements, a more detailed examination and justification of their purchase, and a different approval process. Due to their special nature, districts frequently establish a separate capital budget to plan for these large, and sometimes multi-year, expenditures.

Items with lower costs, such as equipment or some alterations to buildings, are more often a part of the annual operations of the district. The relatively smaller dollar amounts involved mean that they can be a part of the annual operating budget.

Equipment. By far the most common type of property expenditure in the district's operating budget is for equipment. This category includes machinery, vehicles, and furniture and fixtures. Expenditures in this area are classified as initial, additional, or replacement items of equipment according to their purpose.

There are a variety of approaches to budgeting for equipment purchases. As a first step, these approaches generally establish a total dollar amount to be spent for equipment purchases for the entire district, although this total may be

6. William T. Hartman, "Participatory Budgeting in High Schools," *Planning and Changing* 20(1) (1989), pp. 15-25.

subdivided by instructional and several different support and operations amounts. A straightforward way to determine the total equipment dollars to be budgeted for the district for next year is to adjust the current equipment expenditure amount for inflation and anticipated changes in needs. In some instances, the district administration or school board will establish a total equipment dollar amount to stay within an overall district budget.

Another procedure is to use a percentage replacement amount for the value of the capital equipment owned by the district. For example, if the district had equipment on the books valued at $10,000,000 and established a replacement percentage of 2 percent each year, then it would have a total equipment budget for the district of $200,000. This equates to a 50-year average replacement cycle. A 4 percent replacement would yield an equipment budget of $400,000 and a 25-year average replacement cycle. An advantage of the latter approach is in communicating with the school board and public. Rather than justifying each equipment item, the district receives approval to spend a fixed sum based on an agreed upon replacement cycle which, in effect, may sound very conservative.

Once the total amount available for equipment has been determined, there are a number of options for districts to distribute that amount to schools and district-level departments. A district can follow the same general allocation procedures as described for supplies and materials. A dollar per student amount is established for equipment and this amount is used to calculate a lump sum allocation to each school based on enrollment. The determination of what equipment items to purchase is left to the principal and staff at each school. It is also possible to combine the dollar per student amounts for supplies, materials, and equipment into one single amount to cover all of these items for a school. This allows the school the flexibility to allocate the total available dollars generated between supplies and equipment as they see fit.

A variation of this approach is to provide a lump sum amount for each school (for example, each high school will be allocated $90,000 to spend for equipment, each middle school $75,000, and each elementary school $40,000). If schools at each level are approximately the same size, equally allocating the total available funds is the most easily understood procedure; however, it does not account for differences in age and condition of the facilities, types of students, or types of instructional program.

Another approach is requiring the schools and district-level departments to submit their equipment requests to the district office. The lists contain the description, quantity, price, and justification of every piece of equipment requested. Often the list items are prioritized to provide a guide for cutting back if the requests exceed the available dollars as often happens. For unified districts the total available dollars are sometimes divided into separate amounts for elementary, middle, and high schools prior to allocating funds to individual schools. This avoids having the

different types of schools compete with each other for limited funds.

To gain further control over high expenditure items, some districts also require all equipment requests over a specified dollar amount to be approved by the school board. This extra step, even if the request is within the total district or school allocation, provides an additional check of spending practices by the body charged with fiscal oversight responsibility for the district.

At times, districts will wish to make special equipment purchases or allocations outside the normal procedures. This can occur when the district wants to implement a new program or activity that has high equipment needs, but does not wish to shift money from the existing programs. An example would be the introduction of microcomputers into the curriculum. It is possible for the district to earmark certain funds for particular uses and allocate them to schools or departments in addition to the regular equipment allocation. These special equipment funds are usually one-time arrangements to cover a particular purpose. For example, a district may provide each high school and middle school with a grant of $100,000 to equip a microcomputer laboratory. This is an expensive venture that would otherwise seriously deplete equipment funds for existing instructional programs. The one-time special grant allows the schools to institute a new program desired by the district while maintaining existing programs' operations intact.

Other property expenditures. School districts face other types of property expenditures besides equipment. A common budget item is to provide for major property expenditures related to emergencies that need immediate attention (e.g., replacing a leaking roof) the district may experience during the year. A contingency amount can be set aside for emergency expenditures of this sort, which by their nature cannot be foreseen. The amount can be established by reviewing historical records for expenditures of this type.

Other property expenditures may be desirable during the year for improvements to both buildings and grounds. Once a dollar amount the district expects to spend for these items has been established (and perhaps divided among elementary, middle, and high schools and central office departments), schools and departments submit requests ranked by priority to use the funds. As inevitably more money is requested than is available, the highest priority expenditure requests are approved in order until the funds are exhausted. Within these requests, items to improve the safety of students or to remove a safety hazard are usually given highest priority. These are followed by requests affecting the largest number of students, those critical to instructional programs, and those which have been on the request list for the longest time.

Other Objects

There are other expenditures the school district incurs and must budget for that do not fit into any of the previous categories. It is for these expenditures that this *Other* category is used.

The most common types of Other expenditures include dues and fees for the district and its employees, judgments paid by the district as a result of court decisions, and interest on the district's debts. Additionally, any contingency amounts are included in this area.

Due to the nature of these expenditures, budgeting for Other expenditures is usually done at the district level by the business manager or other fiscal officer. Information to develop the budget estimates for interest payments comes from district financial data (interest due in upcoming year). Expenditures for memberships, associations, or other organizations or services for the district or its employees can be budgeted by identifying the particular items and their costs, by projecting a similar cost from prior years' data, or by estimating a cost per employee for which the district has agreed to pay a lump sum. Expenditures to cover judgments rendered against the district are much more difficult to estimate. If the district is not involved in a lawsuit at the time of budget preparation and has not had such a history, then it may not be necessary to budget anything. However, if there is an active lawsuit, the district expects one, or the district wishes to self-insure against the possibility of losing a suit, then an expenditure amount can be included in the budget. It is usually put in a reserve account until it is actually required, if at all. The amount set aside is based on the size of the expected judgment against the district. Contingency amounts are established based on past experience and future expectations about the areas and types of expenditures the contingencies are set up to cover.

Other Uses of Funds

Although not technically classified as expenditures, there are some important transactions the district needs to include in its financial planning for the upcoming year. These include reduction of principal (payments to retire long-term debt), housing authority obligations, and fund transfers (generally from the general fund to other funds). Projections for debt and housing authority obligation payments are developed from existing district financial data (e.g., debt repayment schedules). Fund transfer estimates are included to account for any anticipated outlays from the general fund to other funds; these amounts are based on planned transfers (e.g., $1,000,000 per year into the capital reserve fund to accumulate funds to build a new elementary school) or to provide operating subsidies for operations in other funds (e.g., $50,000 subsidy to food service fund).

Revenue Estimates

Revenues are the monies coming into the school district. They come from a variety of sources: local taxes and other local sources, state government, and federal agencies. While there are wide variations across states, nationally over 90 percent of the money spent on elementary and secondary education is provided by state

governments (45.6 percent) and local funds (47.4 percent). Federal funds account for only 7 percent of the funding.[7]

Revenues are used to pay for the expenditures incurred to operate the instructional, support, administrative, and other operations of the district. As noted several times before, revenues and expenditures must balance. State statutes usually require that districts' planned expenditures cannot exceed their revenues. If on initial estimates, the anticipated revenues of a school district are less than the projected expenditures, then the district must reduce the expenditures, find other revenues, or use some combination of both actions to reach a balance. If, however, the initial estimates indicate that the revenues in the upcoming year will be greater than the planned expenditures, the district can reduce the taxes on its patrons, expand existing or begin new programs, reserve some of the amount for future use, and/or establish a contingency fund to achieve a balance between revenues and expenditures.

Proper revenue estimation is important. It allows the district to plan for and provide the best possible educational program. It assists in maintaining the financial credibility of the school district with the school board and community. Large sums that are "found" during the school year as a result of underestimating revenues can cause suspicion among district voters and have on occasion caused superintendents and business managers to lose their jobs. On the other hand, overestimating revenues can cause program cutbacks during midyear, as the expected revenues do not materialize to cover expenditures.

Estimating revenues is not necessarily easy. School districts have much less control over revenues than expenditures. They are dependent upon state and federal legislatures for decisions on amounts to be appropriated for education, and they rely on state and federal departments of education for receiving the amounts actually allocated to them. Additionally, they may need approval from the local voters for a property tax levy or other taxes, and not all of the taxes levied will be collected in the year in which they are due. All of these processes can be influenced somewhat by school district efforts, but unlike the expenditure side of the budget, the school district does not have the final authority to determine many of its revenues.

Nevertheless, revenue estimates must be made, and they should be as accurate as possible using all available information. The district can and should obtain the latest projections of revenue levels from its various sources. These projections should be updated as new information becomes available so that the district's final revenue estimates will be the most accurate possible.

Estimating revenues is a much more centralized process than estimating expenditures. Revenue estimation is usually done by the business office. The

7. National Center for Education Statistics, *The Condition of Education 1996*. (Washington, DC: U.S. Department of Education, 1996), Table 51-3.

process consists of collecting information about anticipated revenues from the agencies providing those funds, organizing and analyzing this information, and developing revenue estimates for the upcoming year. Compared with estimating expenditures, revenue estimation involves a smaller number of people since there are relatively few revenue sources. This allows the district administration to maintain a close control over the process.

Estimating Revenues

There are two primary dimensions to estimating revenues. First, revenues are estimated by *fund*; that is, projections are developed separately of revenues for the General Fund, Special Revenue Funds, Capital Projects Funds, Debt Service Funds, Enterprise Funds, and any other funds used by the school district. Second, within each fund, estimates are made of the revenues to be received from each individual *source* of revenue. The sources are categorized by organizational level within the educational system and include local, intermediate, state, federal, and other sources. For each level, the amount of money anticipated from each particular revenue item or agency is projected. A revenue classification scheme for organizing, developing, and presenting estimated revenues is shown in Chapter 3.

The procedures for developing revenue estimates are straightforward, although it may be difficult at times to obtain reliable information on certain revenue items. Generally, the steps involve 1) identifying the specific areas or agencies from which the district anticipates revenues in the upcoming year and 2) estimating or calculating the dollar amount expected from each item or agency.

Local Revenues. Local revenues come from a variety of places. The largest single item is the current property tax, which is levied by the local school district. However, there are a number of other important local revenue elements. These include other types of local taxes, such as sales tax and income tax; penalties and interest from delinquent taxes; revenues from other local government units, such as cities or counties; tuition; transportation fees; earnings on investments; food service operations; pupil activities, such as admissions to school-sponsored activities, membership fees, and participation fees; and other local sources, such as rentals of district facilities or equipment, contributions or donations from private sources, sale of fixed assets owned by the district; and revenues for services provided to other school districts.

The procedures for estimating current property taxes the district will receive next year depend on state regulations. In states that limit the amount of local property tax a district can raise, districts can calculate the maximum property tax allowable. If politically acceptable, this becomes the estimated revenue amount for the budget. When summed with the other revenue amounts, the total revenue amount establishes a limit on expenditures, since total expenditures cannot exceed total revenues. This is, in effect, a revenue-driven budgeting process. The available

TABLE 4.10
Types of Budget Processes

Revenue Driven Process	Expenditure Driven Process
Available revenues determine expenditure levels	Desired expenditures less all other revenues determine amount of property taxes needed
Total revenues, except current property taxes	Total Expenditures
+ Current Property Taxes	- All other revenues, except current property taxes
= Total Expenditures	= Current Property Taxes

revenues establish the level of expenditures, which in turn determine the programs and services offered by the school district.

In other states, where the only limits on a district's local property tax levy are political—that is, what the school board or voters will approve—a different procedure may be used. The total expenditure requests determine the total amount of revenues needed. From this total amount, the revenues from all sources, except the current property tax, are subtracted; these include other local, intermediate, state, and federal revenues. The balance remaining is the amount needed from local property taxes. This budgeting process is primarily expenditure-driven. The desired level of expenditures is the fixed element that determines the level of local property tax levy needed to finance the programs and services to be provided by the school district. The two different processes are contrasted in Table 4.10. In practice, even expenditure-driven approaches are limited by the level of politically feasible tax levy, and expenditure plans may have to be scaled back to maintain acceptable levels of local taxation.

After the local property tax amount is established, it is possible to calculate the district's tax rate. Tax rates are usually expressed in one of two ways: millage or property tax dollars per thousand dollars of assessed value. Both approaches are identical although different terminology is used. One mill is equal to $1.00 of tax per $1,000 of assessed value. To calculate the tax rate, the total property tax amount levied by the district is divided by the assessed valuation of the taxable property in the district, divided by 1,000. A sample tax rate calculation is shown in Table 4.11. The assessed value amount should be available from the tax assessor's office, which since it has the assessment data, may even do the calculation for the district.

TABLE 4.11

Tax Rate Calculation

$$\text{Tax Rate} = \frac{\text{Current Property Tax Levied by District}}{\text{Assessed Value of Property in District}/1{,}000}$$

Example:
If the district levies $13,000,000 in property taxes and the total assessed value of the district is $1,000,000,000, then the tax rate is:

$$\text{Tax Rate} = \frac{\text{Current Property Tax}}{\text{Total Assessed Value}/1{,}000} = \frac{\$13{,}000{,}000}{\$1{,}000{,}000{,}000\ /1{,}000} = \$13.00\ /\$1{,}000\ \text{AV}$$

or

13 mills

As shown in the example, the tax rate is only one component of the property tax levy. It works in conjunction with the assessed property value in the district. The assessed value of the district multiplied by the tax rate yields the property tax to be collected. Unfortunately, this is not always clearly understood by the public or the media. If the district's assessed valuation is rising, it will be able to raise more local property tax dollars even though the tax rate may not change from the prior year's level. This relationship also works in reverse: a reduced assessed valuation in the district can lead to higher tax rates, but no more actual property tax dollars for the district. The greatest opportunity for property tax dollar increases (or decreases) occurs when changes in both factors work in the same direction—a rising (declining) assessed valuation in the district coupled with a higher (lower) tax rate. Examples of these variations are shown in Table 4.12.

The other local revenue items are projected on an item-by-item basis. Using the revenue classification system and the district's historical revenue records as guides, the responsible district personnel develop estimates of money to be received from each local revenue source. As the sources are quite different, the particular estimation procedure will vary. For example, tuition revenues can be estimated from data projecting estimated numbers of tuition-paying students and the tuition amounts to be charged, while earnings on investments can be estimated from projected interest rates, the dollar amounts, and length of time which the district will have its funds invested over the next year. For revenue items that

TABLE 4.12

Tax Rate and Assessed Value Relationships

Tax Levy	=	Tax Rate	x	Assessed Value		
Base Year Example						
Tax Levy	=	$13.00 /$1,000 AV	x	$1,000,000,000	=	$13,000,000
Constant Tax Rate with Rising Assessed Value Yields Increased Tax Levy						
Tax Levy	=	$13.00 /$1,000 AV	x	**$1,100,000,000**	=	**$14,300,000**
Constant Tax Rate with Declining Assessed Value Yields Decreased Tax Levy						
Tax Levy	=	$13.00 /$1,000 AV	x	**$900,000,000**	=	**$11,700,000**
Increased Tax Rate with Declining Assessed Value to Maintain Base Tax Levy						
Tax Levy	=	**$14.44** /$1,000 AV	x	**$900,000,000**	=	$13,000,000
Reduced Tax Rate with Rising Assessed Value to Maintain Base Tax Levy						
Tax Levy	=	**$11.82** /$1,000 AV	x	**$1,100,000,000**	=	$13,000,000
Increased Tax Rate with Rising Assessed Value Yields Greatest Tax Levy						
Tax Levy	=	**$14.00** /$1,000 AV	x	**$1,100,000,000**	=	**$15,400,000**
Reduced Tax Rate with Declining Assessed Value Yields Least Tax Levy						
Tax Levy	=	**$12.00** /$1,000 AV	x	**$900,000,000**	=	**$10,800,000**

represent significant amounts of money to the school district, it may be worthwhile to develop statistical estimates of their projected amounts. For example, delinquent property taxes could be estimated from a regression analysis using the prior year's total property tax levy as the predictor variable. More sophisticated analyses could also use the prior year's uncollected tax amount, total cumulative uncollected tax amount, or lag the predictor variable(s) by more than one year.

Funding from Intermediate Sources. Intermediate sources are those agencies located between the local district and the state in the educational system. Examples include county units, multi-county units, multi-district cooperatives, and regional programs. If the district receives revenues from any intermediate sources, these should be included in the district's budget.

In some instances an intermediate unit may have its own taxing authority and distribute some of the revenues it raises itself to districts inside its boundaries. In other cases, a district may receive funds from an intermediate unit for operating a program that also serves students from several other districts. An example would be revenues received by a large district from a county educational unit for operating a special education program for the whole county that enrolls disabled students from surrounding smaller districts.

To develop estimates of revenues from intermediate sources, district officials need to contact the intermediate educational agency personnel who have information about the funding they expect to provide the district. These estimates can be refined and updated during the budget process with regular contact through the intermediate educational agency.

State Revenues. The primary types of state revenues for school districts are general aid, categorical aid, and in some states, revenues in lieu of taxes. Of the three, the general aid monies provide by far the most total revenue dollars. State aid is appropriated by the state legislature and distributed to school districts by the state department of education or other state agency. The best source of information about the expected level of state aid will usually be the department of education. School finance personnel in the department may provide districts with departmental estimates of the amount of general fund revenues they can expect in the upcoming year. Similar estimates can be obtained for categorical revenues. Estimates of the level of revenues in lieu of taxes may come from the department of education or perhaps from the state department of revenue, if they are the agency distributing these funds.

The timing of state revenue estimates may be awkward for district budget planning if the legislature is slow in reaching educational appropriation decisions or if it changes the amounts to respond to changing state fiscal conditions. If the legislature has not determined the state funding support for education before the district has to compile its budget document, then the state revenue estimates will be uncertain. This uncertainty cannot be allowed to paralyze the budget process, however. Districts must use the best estimates available. A conservative estimate is usually made in such situations to protect the district against overestimating revenues it will finally receive. Throughout the district's budgeting process, district officials responsible for revenue estimates should keep in contact with the appropriate state contacts to obtain the latest estimates for state aid.

Federal Aid. Money for federal aid for elementary and secondary education is appropriated by the U.S. Congress and distributed by the U. S. Department of Education. The federal funds are largely directed to categorical programs such as Education for the Disadvantaged, Education for Individuals with Disabilities, School Improvement Programs, and Vocational and Adult Education.[8] Operation-

8. Charlene M. Hoffman, *Federal Support for Education: Fiscal Years 1980 to 1995*. (Washington, DC. U.S. Department of Education, National Center for Education Statistics, 1995), p. 9.

ally, most of these funds are channeled through the state to be distributed as grants to local school districts. In addition, large dollar amounts are distributed in the form of revenues in lieu of taxes through such programs as Impact Aid to school districts with federal installations.

Federal sources usually represent less than 10 percent of the total district revenues and generally an even smaller proportion of the General Fund revenues. However, in some programs the operations are largely supported by federal monies. Without federal funds, some districts would find it difficult to maintain certain categorical programs at their present levels of service and would face either reducing or eliminating programs or supporting them with funds from other sources.

The federal funding process is much farther away from the district, both in geographic distance and in the information that may be available to the district. Since most federal monies come to the district via the state department of education, the personnel at the state level responsible for federal programs are often the best contacts for funding information. From these state contacts, districts should be able to obtain the most reliable information on expected funding levels, timing of receipt of funds, and associated regulations with which to comply.

Balancing Expenditures and Revenues

The final phase of budget building is to balance the expenditure requests with the projected revenues. Contrary to what might be implied above, there is generally not an automatic balancing of expenditures and revenues. With either a revenue-driven or an expenditure-driven process, estimated expenditures may exceed the anticipated revenues. In this case, it is necessary to revise expenditure estimates and revenue projections to reach a balance. This is an iterative process that may take several attempts to complete. The reverse situation is possible, of course. Projected revenues could be greater than estimated expenditures, but usually this is not the case as there is rarely a shortage of legitimate expenditures.

There are two basic methods of balancing the budget when expenditure requests are greater than projected revenues. The first is to reduce expenditures and the second is to increase revenues. If the expenditure reductions needed are relatively small, it may be possible for the central office administrators to make them in consultation with the school administrators and district department heads. Larger cuts can also be made this way, particularly if the expenditure requests have been prioritized when they were developed. However, if the required cuts are significant, it may be useful and necessary to have the school administrators and district department heads resubmit their expenditure requests after having decided on where cuts could be best made or where they will do the least damage. This process is the subject of Chapter 5.

Revenue increases are more difficult for the district to obtain. One place to start is with updated revenue estimates from state and federal department of

education officials and with the latest assessed valuation and property tax collection projections from the tax collector's office. The latest estimates should be more accurate, but there is no guarantee that they will show an increase. Nevertheless, it is essential to work with the most reliable information available.

Other possibilities for revenue increases are from local sources. The most significant revenue source to balance revenues and expenditures is the local property tax. If the district is legally limited in the amount it can levy, then this avenue is also closed. However, in those situations where an increase in the property tax levy is permissible, this offers an opportunity to balance the budget. The analysis and the ultimate answer are political rather than economic. The district administrators and the school board must decide if the property tax levy increase necessary to balance the budget is politically feasible. Will it be accepted by the taxpayers, and if necessary, supported by the voters? If they believe so, then the proposed tax levy (or tax rate or school budget, depending on the form of the election) can be approved by the board and submitted to the voters, if required. If property tax increases are not politically feasible or if the voters reject the increase, then expenditures must be reduced until they equal available revenues.

A tactic that can work for the short-term is for the district to reduce its cash carryover (the amount of money carried over from the end of one fiscal year to fund the expenditures during the beginning of the next year before state aid and property tax revenues are received) and amounts held for contingencies. This can provide additional revenues for the upcoming year, but it reduces the district's financial flexibility and increases the risk of not being able to respond to emergencies. An appropriate fund balance level has been recommended to be in the 4 percent to 12 percent range of the district's total expenditures depending upon the uncertainty associated with the district's financial condition.[9] The actual amount should be a function of factors affecting the probability that the district will require the use of contingency funds during the year. These factors include 1) condition of the fixed assets of the district (unexpected operation and maintenance expenditures); 2) stability of tax collection rate; 3) uncertainty of state revenues (amount and timing); and 4) total expenditures (general contingency).

It is important to keep in mind the short-term nature of fund balance monies as a revenue source. Any ongoing need for funds supplied from the fund balance in a given year will require a double tax increase the following year if revenues have to be obtained from local funds: once to replace the fund balance monies from the previous year and a second amount to shift the source of funding over to local taxes. This tax increase will be in addition to any normal tax increase to cover inflation or to provide for additional program expenditures. Consequently, revenues from the fund balance are best used for one-time expenditures or to

9. Sandra R. Vidlicka and William T. Hartman, "How Much Is Enough? Sizing a District's Fund Balance," *School Business Affairs* Vol. 60, no. 2 (February 1994), pp. 4-9.

achieve permanent reductions in the level of the district's fund balance.

The district may also undertake such strategies as writing grant proposals for funds from public agencies or private foundations; seeking community and business contributions of money, equipment, or personnel; improving its cash management procedures to increase investment earnings; or leasing vacant facilities. While the income received from these ventures may be helpful, it is usually marginal to the overall budget. If the gap between expenditures and revenues is large, it will not usually be closed by attempts to increase other local revenue.

Summary

Developing accurate expenditure and revenue estimates is the key element in budget preparation. It is an activity that involves many people in the district. Establishing expenditure levels is the aspect of budgeting under the greatest control of administrators. In contrast, the school district is dependent upon the decisions of state and federal legislatures and agencies for much of its revenue.

The accounting structure is used to organize the detailed expenditure and revenue estimates in the budget. While sometimes a bit tedious, the accounting codes do provide an indispensable means of categorizing and planning district expenditures and revenues in a uniform and manageable way.

The budget in its completed form can be a massive document with an overwhelming amount of detail. However, it is built from individual elements: school and department budget requests, as well as revenue projections. Revenue estimates, which are less complex than expenditure projections, are developed for each source the school district anticipates receiving funds.

Expenditure estimates begin by projecting the number of students expected by the district in the next year. Both the numbers and types of personnel required can be calculated using student projections. Anticipated expenditures are then estimated for each cost center (e.g., school, district-level department) by function, program, and level of operation (e.g., Instruction/Regular/Secondary, School Administration) and within those by subject matter or subfunction (e.g., Mathematics, Office of Principal); and by the type or object of expenditure within each cost center and function (such as, salaries, employee benefits, purchased services, supplies and materials, capital outlay, and other objects).

The general approach to developing the specific amounts for the expenditure estimates is shown below.

1. Identify the activities in the organizational unit or subunit for which the expenditure budget is being developed.
2. Specify the type and quantity resources needed to carry out the tasks at the expected level of activity.
3. Put prices on the resources and sum up to reach a total cost for the program.

The budget is an important management tool for planning and implementing educational programs. The projected expenditures reflect the priorities of the district as determined by the educational philosophy and beliefs of the school board members, district administrators and instructional staff, parents, students, and the community, by the regulations and requirements from state and federal agencies, and, at times by mandates from the courts. The revenue estimates determine the expected availability of funds to support those desired and required programs. In developing expenditure estimates for next year's operations, districts have to work within fiscal constraints, as expressed in the revenue projections. The objective is to provide the best and most effective educational programs with the available dollars. An effective budgeting process should help districts to achieve this goal.

Problems

4.1 Over the last five years, North City Elementary School District has had the student enrollments listed below.

GRADE	4 Yrs Ago	3 Yrs Ago	2 Yrs Ago	1 Yrs Ago	This Yr
K	532	507	517	528	535
1	521	526	523	525	537
2	505	502	492	481	498
3	510	495	484	477	491
4	486	479	482	476	457
5	475	488	488	465	486
Total	3,029	2,997	2,986	2,952	3,014

Data from local health records indicate that the number of live births in the area for the past 10 years were:

10 Years Ago	1,377	5 Years Ago	1,528
9 Years Ago	1,400	4 Years Ago	1,557
8 Years Ago	1,491	3 Years Ago	1,575
7 Years Ago	1,436	2 Years Ago	1,633
6 Years Ago	1,650	1 Years Ago	1,599

Using the cohort survival method, calculate the survival rates in each of the grades for the past five years. Project the district's enrollment by grade and total for the next two years.

4.2 Develop a teacher salary schedule having the following characteristics:

a. Twenty experience steps (one step per year).
b. Five education levels (title them appropriately).
c. An experience increment of $1,500 for steps 2-10, an experience increment of $2,000 for steps 11-15, and an experience increment of $2,500 for steps 16-20.
d. Education level increments of $1,500, $2,000, $2,500, and $3,000 over the prior level respectively for succeeding levels beyond the first level.
e. A beginning salary of $35,000.
f. An experience level maximum of step 15 for the first two education levels.
g. An experience level maximum of step 18 for the third and fourth education levels.
h. An experience level minimum of step 3 for the last two education levels.

4.3 Student Support Services Budget For Alder School District.

Dr. Chancy has recently been appointed Associate Superintendent for Student Services for Alder School District. In a recent meeting, the district superintendent has asked Dr. Chancy to prepare a budget for the costs of the student support services for the next year.

According to established district policy, student support services consist of five main activities: attendance and social work; guidance; health; psychological services; and speech pathology and audiology. The student support services activities are managed centrally by Dr. Chancy assisted by a speech therapist serving as assistant director and one secretary.

Some services are provided to all students, while others are differentiated academically or vocationally. Additionally, specialized services are offered to disabled students by specially trained personnel. District personnel guidelines have been established for student services personnel; they are given in Table 1.

In addition to the personnel requirements, other activities undertaken in the program require consideration in the budget. The guidance program does career aptitude testing for all 11th graders; the usual procedure is to purchase a package from an outside firm that includes the tests and their scoring for a fee of $6.00 per pupil. The tests are administered by the homeroom teachers. Historically, about 10 percent of the emotionally disturbed students annually have required psychotherapy services by an outside mental health professional; the cost has averaged about $3,600 per student treated.

In a visit to the Planning Office, Dr. Chancy obtained estimates of

TABLE 1

Position	Staffing Pattern	Type	Average Salary	Salary Range
Attendance Officer	1.0 per district	Noncertificated	$16,300	
School Social Worker	1.0 per High School 1.0 per Middle School 0.2 per Elem. School	Certificated	$49,000	$38,000 to $60,500
Guidance Counselor	1 per 800 high school students 1 per 1500 middle school students 1 per 150 handicapped students	Certificated	$47,500	$38,000 to $67,500
Secretary I	1 per 5 Guidance Counselors	Noncertificated	$21,300	$18,000 to $25,400
School Nurse	0.5 per High School 0.3 per Middle School 0.5 per Elem. School	Certificated	$46,000	$35,000 to $56,000
Health Aide	0.5 per school	Noncertificated	$10,400	$9,700 to $12,200
Speech Therapist	1 per 50 speech handicapped students	Certificated	$50,500	$41,500 to $64,500
Audiologist	1 per 100 hearing impaired students	Certificated	$47,500	$39,500 to $60,000
Secretary III	1 for Director	Noncertificated	$25,100	$23,200 to $27,800

Dr. Chancy's current salary is $72,500.
Assistant Directors receive a 20% salary increment over their normal salary.

TABLE 2

Elementary		Middle		High School	
Number of Schools	11		2		2
Total number of Students in District*					
Kindergarten	890	Grade 6	920	Grade 9	860
Grade 1	900	Grade 7	900	Grade 10	820
Grade 2	930	Grade 8	880	Grade 11	760
Grade 3	920		2,700	Grade 12	710
Grade 4	910				3,150
Grade 5	910				
	5,460				

Number of Handicapped Students in District	
Mentally Retarded	240
Learning Disabled	310
Hearing Impaired	31
Visually Impaired	12
Physically Handicapped	42
Speech Impaired	366
Emotionally Disturbed	92
	1,093

* Includes both handicapped and nonhandicapped students

student enrollments for next year. They are shown in Table 2.

From the Business Manager, Dr. Chancy collected cost information relevant to the student services programs. The average salary and the salary range for various positions in the district are also shown in Table 1. Benefits in the district averaged 22 percent of salary plus $3,500 per person for medical insurance. The Business Manager told Dr. Chancy that the recently concluded salary negotiations would increase salaries by 4 percent in the coming year. The Business Manager also provided a list of cost estimation standards for other budget items. They included: $150 per position (certificated and noncertificated) for office supplies; $100 per position for telephone charges; $750 per position for local travel for all positions except clerical; $60 per certificated position for periodicals; and $50 per certificated position for postage. Equipment costs for new and replacement

equipment are estimated at $1,000 per certificated position and $500 per noncertificated position.

Prepare a budget covering the costs associated with the district's student support services activities for next year. In presenting the budget, follow the instructions below.

1. The budget should be prepared in a standard format by third level FUNCTION/PROGRAM code where possible, and by OBJECT of expenditure code within each function. Use different combined function/program codes as needed to separate costs by their purposes. In addition to other functions, use a separate function (2101 Service Area Direction) to account for the overall administration of Student Support Services. Give the object codes to the lowest level for which you have information.
2. Present your results in a neat, easy to follow format.
3. Show your calculations separately and include them as an explanation for your budget.
4. Round all positions to the nearest one-tenth (0.10) full-time equivalent (FTE), and show position counts in the budget.
5. Include personnel costs in your budget.
6. Round all cost calculations to the nearest $10.

4.4 Special Education in Dunn School District

As the recently appointed Assistant Superintendent for Special Education in Dunn School District, Dr. Kirk was developing the budgets for the upcoming school year for the three district programs for students with handicapping conditions: physically handicapped (PH); emotionally disturbed (ED); and learning disabled (LD). To begin this task, she gathered the information described below.

CURRENT ENROLLMENT BY PROGRAM

Physically handicapped	61
Emotionally disturbed	22
Learning disabled	193

The physically handicapped students are served in one of two instructional settings: self-contained classrooms or with instructional aide assistance in regular classrooms. There are presently 48 physically handicapped students in special classrooms and this number is projected to grow by 20 percent next year. The other PH students receive aide assistance and a 25 percent growth in students in this placement is expected next year. (Note: The aide assistance component is considered the only element of special education instruction for these students and all of its associated costs are part of the

special education budget. The costs of their regular classroom instruction are included in the regular programs budget.)

All of the emotionally disturbed students are placed in a special program operated by a neighboring school district. The same number of students are expected in this program next year. Dunn School District pays a tuition of $7,500 for each of these students to the neighboring district. Tuition will increase to $8,000 per student next year.

Eighteen of the learning disabled students are now placed in special classes and an approximate 10 percent growth in this placement are expected next year. (Note: The special classes for each handicapping condition contain only students with that handicap, that is, learning disabled and physically handicapped students are not mixed in the same special class.) The remainder of the learning disabled students are served in resource rooms involving part-time special education instruction for these students; a 12 percent growth in students served in this placement next year is anticipated.

The district follows the state guidelines for class size and staffing for each of their special education placements. These are outlined below.

Program	Placement	State Guidelines	District Class Size	Staff/Unit
PH	Special Class	10-12	11	1 Teacher and 2 Aides
	Aide Assistance	2-4	3	1 Aide
LD	Special Class	10-12	11	1 Teacher and 1 Aide
	Resource Room	25-35	30	1 Teacher and 1 Aide

In determining the number of staff needed, the district policy is to round to the nearest whole number for teachers and to the nearest half position for aides. For example, 2.3 teachers would be rounded to 2 teachers and 2.2 aides would be rounded to 2 aides, while 2.4 aides would be rounded to 2.5 aides. However, in program units involving both teachers and aides, the teacher rounding rule is used for both types of positions to maintain the proper staffing patterns.

Special education teachers are given three days per year of release time to assist in developing formal instructional plans for their students and to confer with parents. Substitute teachers are hired to replace the teachers

during release time. Aides are sometimes required to work extra hours to deal with specific student problems. They average five hours per month in overtime duties for which they are paid additionally.

Some of the physically handicapped students also require additional services. Thirty-five students receive two individual 1/2 hour physical therapy sessions per week from private physical therapists. These services are provided for the entire school year (36 weeks) and cost $40.00 per hour. Also, 22 PH students require special transportation to transport them from home to school; this cost averages $1,500 per student annually. No change is expected in the numbers of students receiving either of these services or their costs next year.

Both the PH and LD programs have program supervisors who work to direct and improve the instructional programs by assisting teachers, developing and evaluating curriculum, and monitoring student progress and teacher performance. They are considered supervisory, not instructional, personnel. Half of one supervisor's time is assigned to the PH program, while the LD program has a full-time supervisor. They share a single secretary.

The district's business manager, Mr. Martin, provided information on salaries and cost standards for budgeting. The average special education teacher has a Master's degree and 10 years of experience. Use Table 4.6 as the district's current salary schedule for teachers. The average salary for instructional aides is $16,600 for a nine month contract. The recently concluded collective bargaining negotiations provide for a 5 percent increase in salaries for all instructional personnel next year (teachers and aides) and a total employee benefit package costing the district 30 percent of base salaries. Aides will receive $16.00 per hour for any overtime work. Substitute teacher costs are projected at $110 per day for each substitute teacher used. Additionally, the district will pay professional dues of all certified staff; these average $70.00 per staff member in special education.

Supervisors' salaries are based upon 125 percent of average teacher salary. Secretaries currently average $22,000 per year and will receive the same percentage salary increase and benefits as the instructional personnel. Supervisory personnel have a budgeted allotment of $1,800 per full-time position for traveling among the schools, $300 per full-time position for supplies, and $90.00 per full-time position for communication expenses. These allotments are based on certified supervisory positions only.

The table below gives the district cost standards for other items in the special education programs.

Items	Special Class	Resource Room	Aide Assist.
Supplies	$150/student	$105/student	$85/student
Textbooks	$ 60/student	$ 45/student	$25/student
Equipment	$900/classroom	$400/resource room	$250/aide

The special classrooms for both the PH and LD programs are all housed in a single building, which is rented by the school district for $1,600 per month. The district uses the building during the school year (nine months) only for these classes and uses the building for other activities during the summer. The terms of the rental agreement call for the school district to pay for property insurance (annual 12-month premium of $2,400) and for electricity ($240 per month average). Resource rooms and aide assistance are carried out in regular school buildings and are not charged with any of the building operation costs.

The revenues to fund these special education programs come from three sources. Federal monies for the education of handicapped students are received by the district in the amount of $300 per handicapped child. The state contributes 30 percent of the total district special education expenditures from its categorical funding program for handicapped students. Any additional revenues needed to support the program are provided by the district from its available resources.

Prepare a budget for all of the relevant expenditures and revenues for these three special education programs in Dunn School District next year. In developing and presenting the budget, assume that a separate FUND has been established to account for all expenditures and revenues for these programs. In presenting the budget, follow the instructions below.

1. The budget should be prepared in a standard format with expenditures presented by third-level FUNCTION/PROGRAM and by OBJECT of expenditure codes within each function. Use different combined function/program codes as needed to separate expenditures by their different purposes. Give the object codes to the lowest level for which you have information.
2. Revenues should be presented by appropriate source code.
3. Present the results in a neat, easy to follow format.
4. Show the calculations separately and include them as an explanation for the budget.
5. Include personnel costs in the budget.
6. Round all cost calculations to the nearest $10.

4.5 Bilingual Education Budget For La Esperanza School District.

Dr. Cabeza has recently been appointed head of Bilingual Education for La Esperanza School District. The district has been selected to receive a large

grant from the U.S. Department of Education to develop a model bilingual elementary school. The district expects that the grant will cover all of the costs of operating the model school. Bolivar Elementary School has been designated as the site for the model bilingual school that will teach some courses in English and others in Spanish. The bilingual elementary school will provide students with an opportunity to learn Spanish through "partial immersion" in the language. Authorization for the establishment of the bilingual elementary school was based on research findings which suggest that children have a superior capacity for learning a second language at an early age and that children in bilingual programs meet or surpass their peers in English reading tests and in their mastery of subject content by the end of the fifth grade. The program would also serve to broaden the students' awareness of other cultures and encourage better relations among ethnic groups.

The district superintendent has asked Dr. Cabeza to prepare a budget for the new bilingual school for the next year. The school board has requested that both the costs and revenues associated with the new school be included.

The program is scheduled to begin next September and will include all six grades in the school. Bolivar will operate on a nine month schedule, corresponding to that of the other schools within the district. Projected enrollments for next year are:

Grade 1	51 students	Grade 4	52 students
Grade 2	46 students	Grade 5	48 students
Grade 3	45 students	Grade 6	46 students

Bolivar School will be directed by Dr. Cabeza as the principal with the assistance of an assistant principal (nonteaching) plus one full-time and one half-time secretary.

Personnel guidelines have been established for the upcoming school year for Bolivar Elementary. They are:

- Two teachers for every grade
- One full-time aide for every 10 students in grades 1-3
- One full-time aide for every 25 students in grades 4-6

The equivalent of six FTE aides will be upper-level Spanish students from the nearby Montezuma High School. Each of the high school students aides will work at no cost, but will receive scholastic credit based

on job performance. These aides will be evaluated and supervised by the individual classroom teachers, as well as the assistant principal. All other aides will be employed by the school district.
In determining the number of staff positions needed, the district policy is to round to the nearest whole position for teachers and to the nearest half position for aides.

A workshop and week-long orientation to prepare the program staff is scheduled for late August. Dr. Cabeza has arranged for faculty from a local university to provide the training at a cost of $6,000.

Transportation from home to school will be provided by the district for students who live more than one mile from the school. This will involve about 60 percent of the students. The district contracts with SchoolTrans Bus Co. for its transportation services. Next year's contract specifies an annual cost of $900 per student for every student utilizing the bus services regularly.

The district's business manager, Mr. Negocios, provided the following information on salaries and cost standards for budgeting purposes. For a nine month contract, the average teacher salary in the district is projected to be $45,000, beginning teacher salaries are projected at $32,000, and the full-time instructional aide salary is projected to be $12,200. However, due to the shortage of qualified bilingual teachers, Dr. Cabeza estimates that an additional salary increment of 5 percent will be necessary to attract and keep the bilingual teachers needed at the new school. Secretaries will average $23,600 per year, while new secretaries will begin at $17,000. All instructional, classified, and administrative staff will receive the same benefits, which are 26 percent of their contract salary amount. In addition, the district will pay for the Public Employees Retirement System (PERS) benefits for each position; the cost of this benefit is 6 percent of total eligible salary.

The district has agreed to pay professional dues of all certified staff; these average $120 per certified position. Bilingual teachers are encouraged to attend one-day statewide bilingual education conferences, which occur twice yearly, and $300 in travel expenses are allotted to each teacher annually for this purpose. Substitute teachers are hired to replace them during these conferences. Bilingual substitutes are also in high demand and are projected to cost $130 per day.

Principals and assistant principals have 11-month contracts in La Esperanza School District. Their monthly salaries are based upon 140 percent and 120 percent, respectively, of the average district teacher monthly salary. Secretaries also have 11-month contracts. During the nine months that school is in session, full-time secretaries normally average about 10 hours of overtime per month and half-time secretaries average 5

hours per month. The district pays them $10.00 per hour for overtime. Five new first-year teachers and the full-time secretary are planned to be hired for the school next year. All other teachers, aides, administrators, and clerical staff are already employed by the district.

District guidelines allow $90 for general instructional supplies and $50 for textbooks per student. Each instructional certified position qualifies for $60 for Hispanic periodicals, $500 for equipment, and $30 for postage. A one-time start-up expenditure of $25,000 for special instructional equipment for the school is also planned. The school office will have a copying machine, which costs $150 per month on an annual lease arrangement. Three telephones in the principal's office are expected to cost $30 each per month. Additionally, the district allocates $1.00 per student to each elementary school principal for postage and $5.00 per student for office supplies.

1. Prepare a budget for the district's bilingual education program for the next year. In developing and presenting the budget, assume that the activities at Bolivar Elementary represent the bilingual program for the district and that a separate FUND has been established to account for all expenditures and revenues associated with the program. Include both expenditures and revenues in your budget.
   a. The budget should be prepared in a standard format with expenditures presented by third-level FUNCTION/PROGRAM code and by OBJECT of expenditure codes within each function. Use different combined function/program codes as needed to separate expenditures by their different purposes. Give the object codes to the lowest level for which information is available.
   b. Revenues should be presented by source with appropriate codes to the lowest level for which information is available.
   c. Present the results in a neat, easy to follow format.
   d. Show the calculations separately and include them as an explanation for the budget.
   e. Include personnel and employee benefit costs in the budget.
   f. Round all cost calculations to the nearest $10.00.
2. After the budget was prepared, the district received notification from the US Department of Education that the model bilingual school grant had been awarded to them in the amount of $675,000 to support next year's operation. Assume that the La Esperanza school board wishes to implement the model bilingual school at Bolivar Elementary as described above with no reductions in planned expenditures, and is willing to fund any shortfall in grant revenue with a transfer from the district's General Fund. Prepare a new revenue section for the budget to account for this change.
3. If the school board had not been willing to make up the shortfall from

grant revenue, what items would you suggest modifying to reduce the budget to match the available revenue from the grant? Identify the particular items to be reduced, the dollar reduction and method of calculation of the reduction, and the potential effect on the district's bilingual program.

NOTES

5 Budgeting Adjustments

The basic requirement in budgeting is balance: Projected revenues must be equal to or greater than planned expenditures. This is not a matter of choice, but a necessity imposed by state statutes. School districts are not allowed to engage in deficit financing.

In achieving a balanced budget, administrators must deal with three types of budget adjustments: budget reductions, budget increases, and budget shifts. Budget reduction is the primary focus of this chapter. It is the situation administrators face most often. It is also the most difficult task for administrators, and one that is highly volatile. Other types of budget adjustments may be necessary if revenues are sufficient to allow an increase in the budget or if resource shifts among district programs are desired.

The adjustments can take place at any time during the budget cycle—from the development process to the end of the operating year. Adjustments are easiest to make in the development period because they can be implemented at the planning stage before actual operations begin. Nevertheless, even at this stage, it may be difficult if significant changes to prior expenditure levels are required.

The requirement for a balanced budget does not disappear once the budget is adopted and the operating year begins. If actual revenues are much less than those projected, or if actual expenditures are much greater than estimated, budget reductions must be made during the operating year to bring revenues and expenditures back into balance. These adjustments can interrupt or cancel programs or services already in operation. If required during an operating year, budget reductions may necessitate cutting back or eliminating programs and services currently provided, laying off currently employed personnel, and canceling vendor contracts.

What can cause a budget imbalance for a school district? After all, the budget was in balance last year; won't the normal inflationary increases in both expenditures and revenues keep it in balance next year? A number of conditions could unbalance the budget. State revenues may be restricted or even reduced due to declining district enrollments or state economic problems. Federal revenues may be cut back. At the local level, economic conditions or assessment practices may restrict the growth in assessed property values. Local taxpayer pressure may limit property tax rate increases. During the year, property tax collections may not be as great as anticipated. On the expenditure side, a salary increase negotiated several years before may be larger than the gain in revenues now anticipated for the

upcoming year. Enrollments may be increasing, requiring additional personnel, supplies, equipment, and facilities. Some essential items, such as energy costs or insurance rates, may have experienced severe price increases. The district may be in need of new equipment, such as computers, or have nonpostponable maintenance obligations, such as fixing leaky roofs that are damaging classrooms, gymnasiums, or offices.

Whatever caused the budget imbalance, either expenditures must be reduced or revenues must be increased. Frequently, a combination of these actions is employed by school districts to balance their budgets.

Types Of Budget Adjustments

Although the most common form of budget adjustment is reducing the budget size, budgets may also be increased or shifted among programs.

Budget Increases

When anticipated revenues are significantly greater than expenditures, it may be appropriate to increase the budget. Adjusting a school district budget by increasing it is generally more pleasant than making reductions.

Where would these additional revenues come from and when would the school district know about them? If higher than usual revenues are estimated during the budget development process, the normal matching of revenues with expenditures will balance the budget before the operating year begins. However, if additional, unanticipated revenues come in during the year from sources such as a higher level of state aid, a greater percentage of tax collections, or a substantial gift, then any adjustments must be implemented during the operating year. These adjustments usually require school board action to authorize the expenditure of the additional monies. Such authorization requires scrutiny of the proposed increases to determine that the monies will be spent wisely and in accord with district objectives.

There are, however, two alternatives to automatically committing the surplus revenues to increasing expenditures. One possibility is to return the surplus to the local taxpayers in the form of lower property taxes. This reduces the revenues available to the school district and can align revenues and expenditures more closely. This is popular with the taxpayers and may build trust and goodwill for future tax increase requests. It has the obvious disadvantage of removing revenues from the school district that could be used to improve or expand current programs or may be needed in future years.

The second alternative is to keep the excess revenues in a reserve account. One means of doing this is to carry the excess revenues forward in the General Fund and allow the unrestricted fund balance to increase above the normal level.

This provides a "rainy day" fund for use in future years when additional revenues may be needed to balance increased expenditures. Another similar approach is to transfer the excess revenues to the district's Capital Reserve Fund. This allows the monies to be held for future use, but restricts their use to capital projects. In either case, the district keeps the monies under its control, but does not spend them in the current year. This has the potential effect of reducing future year taxes.

Budget Shifts Among Programs

Another type of budget adjustment is shifting of monies among district programs. This procedure does not require a change in the size of the overall budget, but rather redistributes existing resources. In the budget development process, it can be used to realign spending patterns with district priorities without increasing total expenditures. For example, districts can use this approach to shift the curriculum emphasis in the district. Allocations for teaching positions and monies for supplies and equipment can be transferred from curriculum areas of reduced emphasis, such as vocational education in some districts, or to areas of increased emphasis, such as math and science. This approach can also be used to finance new programs, such as foreign languages, or fund new initiatives, such as technology, without a budget increase.

Since there are no new dollars added to the budget, there are both winners and losers. Programs that gain resources should be those considered of greater importance, those more central to school district's mission, or those mandated by state or federal statutes and regulations. Conversely, programs that lose resources are presumed to have lower priority. Obviously, if sizable or influential groups object to the programs designated for cuts, these shifts can cause political difficulties. A board member or members with a strong belief in vocational education, for example, may be an effective advocate for maintaining funding levels for those programs. Similarly, internal groups of teachers or administrators may lobby strenuously to prevent losses to their programs. These actions are part of a normal democratic budget development process, but they can inhibit budget adjustments that modify current district practices.

Another type of budget adjustment occurs most frequently toward the end of the operating year: shifting remaining monies from one account to another to spend the available budget. This is an ongoing and regularly practiced form of budget adjustment. These transfers typically involve smaller dollar amounts. Consequently, they are usually less visible to the board or public and are less controversial. Since the budget was developed up to 18 months in advance of actual expenditures, circumstances change, and the need for expenditures in various district programs may decline or increase. Within district policies, administrators are often permitted to shift budgeted expenditures from one area to another to meet current district or school needs. For example, the transfer of monies allocated for supplies

from one high school instructional department to another is frequently done at the principal's discretion. On the other hand, transfers of monies into or out of salary accounts—for example, purchasing a computer with funds originally budgeted for a secretary—may require central office or even school board approval.

The process may accelerate as the end of the operating year approaches. Not all the monies originally allocated in some budgeted accounts will have been spent, while other accounts will have been overspent. Usually, this is not a problem if the unspent amounts can cover the overspent accounts. In fact, administrators should monitor budget accounts under their supervision to determine the status of all important accounts. They may even initiate such account transfers to enhance the operations of their programs. For example, if a high school math department has not spent its equipment budget as the year ends and has no plans to do so, the principal could approve a request by the English department to purchase microcomputers for students to use in a creative writing class. Funds would be transferred from the math department account to cover the expenditure. With an understanding of the status, plans, and needs for each department, the principal is in an excellent position to initiate and direct the budget adjustment process at the school level.

Budget Reductions

Budget reductions are necessary when projected expenditures are greater than available revenues. This situation creates an unbalanced budget, which must be corrected. The adjustments made to reduce expenditures—and to a lesser extent, to increase revenues—comprise the process of budget reduction.

A variety of terms have been applied to the administration of program reduction. Cutback management[1] was a term used in the 1980's, while "downsizing" is a similar term of the 1990's. Ideally, the process should be planned, rational, and carried out in the least disruptive manner. In practice, it is usually messy and complex. Conditions requiring significant reductions are the most difficult for school boards, administrators, district personnel, students, parents, and the public to handle. Unlike budget increases or even budget adjustments, there are no real winners in the educational system with budget cuts. Winning may mean your program was not cut as much as others were or, at best, that your program was spared the axe.

Types Of Budget Reductions

There are two principal types of budget reductions:

1. Cost savings through improved efficiencies.
2. Cost reductions due to program reductions.

1. Cutback management is defined as "managing organizational change toward lower levels of resource consumption and organizational activity," Charles Levine, "More on Cutback Management: Hard Questions for Hard Times," in *Managing Fiscal Stress: The Crisis in the Public Sector*, ed. Charles Levine (Chatham, NJ: Chatham House, 1980).

The first type of reduction occurs because of an improved efficiency in district operations that does not affect the delivery of instructional or support programs or services. The reductions are cost savings which result from changes in operating procedures that have little direct impact on instruction or student services, at least in the short run. From both an educational and management perspective, these are the most desirable types of reductions. The costs of operations are reduced, but the educational programs are largely unaffected.

In contrast to improved efficiencies, the second type of cost reduction is that of program reduction. These reductions result in a cutback in the quantity or quality of programs and services provided by the school district. After the program reduction, a lower level of service is provided than before. This is undesirable, but sometimes necessary. Or in the words of a high school principal facing a central office mandate to reduce expenditures for supplies and equipment by 50 percent: "Do we like it? No. Will we do it? Yes."

Continuum for Budget Reduction Alternatives

There are a wide range of possible reductions between the poles of improved efficiencies and program reductions. Administrators who have to recommend or decide which budget reductions to implement should consider at least two dimensions to their decisions:

1. How to make the cuts.
2. Where to make the cuts.

The continuum shown in Table 5.1 presents a suggested order of *how* to make budget reductions. It is arranged in more or less ascending order of severity. One or more types of reductions may be necessary to reach a balanced budget.

In accord with this order, the first efforts in budget reduction should be locating and making changes that increase operating efficiency or productivity. These activities should yield cost reductions that have the least impact on instructional programs and services. The decisions of *where* to make the cuts are guided by the conventional wisdom of making the cuts as far from the classroom as possible. Instructional programs usually receive priority over support services or administration, and personnel expenditures are maintained in preference to capital outlay.[2]

Reduce prices for services. Administrative efforts to reduce the costs of various purchased services through competitive bidding can have significant financial payoffs. Shopping around for the best price for services purchased from outside firms—such as insurance, data processing, and transportation—can result in lowered costs for the same service. Cooperative purchasing arrangements with other districts can achieve high-volume orders that qualify for quantity discounts from suppliers.

2. William Hartman and Jon Rivenburg, "Budget Allocation Patterns: School District Choices for Available Resources," *Journal of Education Finance*, 11 (Fall, 1985), pp. 219-235.

TABLE 5.1

Continuum for Budget Reduction Activities

1. **Obtain Reduced Prices For Same Services**
   - Competitive bidding
   - Salary adjustments

2. **Increase Productivity**
   - Economize
   - Combine similar functions
   - Modify instructional and/or support approaches
   - Reduce support and administrative personnel and increase responsibilities for those remaining

3. **Defer Spending**
   - Facilities and equipment

4. **Make Across-the-board Cuts**
   - All programs and services reduced approximately equally
   - Differential reductions favoring instruction

5. **Eliminate "Nonessential" Services**
   - Make selective reductions
   - Reduce or drop optional or nonmandated programs and services

6. **Reduce Instructional Positions And Programs**
   - Make selective reductions
   - Increase class size and/or instructional caseloads

This list is based on *Managing Costs Creatively* (Salem, OR: Oregon Department of Education, 1982).

Another form of price reduction that can have a substantial budget impact is an adjustment in personnel salaries. This may be very difficult or even legally impossible for some districts, but if salary costs are reduced without reducing the number of personnel, the district can provide the same level of programs and services at a lower cost. Several possibilities exist for salary adjustments: a reduction in the increase planned for following year (for example, dropping a planned 6 percent increase in the salary schedule to a 3 percent increase, which still provides employees with a salary increase); a salary freeze or no increase; and an actual reduction in salary level for employees. This approach spreads a relatively small individual financial burden over most or all district employees rather than placing a much larger financial burden on a smaller number of employees who would lose their jobs to provide or maintain salary increases for their colleagues.

Increase productivity of district operations. Productivity increases can occur if existing tasks can be accomplished more efficiently. This can be achieved

through efforts to economize the consumption of resources. Examples could include a reduction in the quantity of various supplies and materials used in both instructional and support operations. Energy conservation is also an important potential source of cost reduction. However, some savings in this area are long term and require a current investment in weatherizing, insulating, or purchasing energy efficient equipment to yield savings in later years.

It may also be possible to provide equivalent services in a different format or use a different approach. Positions with similar responsibilities can be consolidated resulting in personnel savings; cooperative arrangements with nearby districts can combine identical functions, such as purchasing; modifications to instructional or support service programs may yield the same results, but at a lower cost; and personnel may be asked to take broader responsibilities as part of their employment.

Identifying processes where productivity increases may be achieved as well as implementing cost-saving improvements, can best be undertaken by cross-functional teams of employees who are associated with the area under consideration.[3] For example, a team to work on reducing microcomputer repair costs, reducing equipment downtime, and improving equipment availability in the classroom could consist of teachers, instructional aides, school secretary, principal, district technology coordinator, computer technicians, and the business manager.

Defer spending. Another means of reducing budgeted or actual expenditures is to defer spending from this year to a later year. This approach calls for staff and students to make do with existing facilities and equipment for another year. Sometimes this is possible; sometimes it is not. For example, replacement equipment requests for a high school can be categorized according to the condition of the existing equipment:

Top Priority: Replace

Current equipment dangerous for students, broken or irreparable equipment.

Second Priority: Replace if funds available

Current equipment worn, but possible to last another year.

Third Priority: Defer if necessary

Current equipment out-of-date, newer and improved equipment available.

However, there are other costs to consider that may reduce the savings from deferred spending. These are the productivity losses from continuing to use inefficient equipment, the loss in learning from continued use of outdated instructional materials and equipment, and the higher costs in later years when the deferred expenditures are finally made. This last point is particularly an issue in building

3. Peter R. Scholtes, *Team Handbook for Educators* (Madison, WI: Joiner Associates, 1994), p. 2-11.

maintenance where deferred spending is common. Delays in maintenance spending lead to greater costs in subsequent years due to inflation, missed opportunities for preventative repairs to avoid serious problems, and greater deterioration of facilities.[4]

Make across-the-board reductions. This approach involves cuts—usually relatively small—applied to all programs. By definition, a straight across-the-board reduction will affect all areas, including instruction. If the board instructs the superintendent to make a 4 percent across-the-board cut in the budget, they can avoid specifying exactly which cuts are to be made. It is frequently more politically palatable for district policy makers to use this approach. In this manner, every program and everyone bears part of the budget reduction burden. It is less divisive than singling out particular programs for reductions while sparing others. The assumption, explicit or implicit, is that all programs will be able to continue in operation with a small, but manageable reduction in available resources and that the programs and services will not be seriously affected. While this may be true for a year or two in some districts, continued application of this approach will slowly starve the district's programs and negatively affect the quality of education provided.

Another difficulty with this approach is that programs have differential abilities to absorb across-the-board cuts. Large programs may be able to share the percentage reduction among more staff members and larger supply and equipment allocations. Programs where staff members and other resources are fewer and less divisible may find the same percentage reduction would eliminate an essential program component. For example, a high school foreign language department required to reduce its allocated teaching positions by 0.5 FTE as part of an across-the-board cut may have to cut its only French teacher (a half-time position), thus entirely eliminating French instruction in the school.

A modification of the strict across-the-board approach is to apply a lower reduction percentage to instruction than other areas. The size of the total reduction required, however, determines to what extent the instructional area can be spared. By excluding or limiting reductions in instruction, the largest and most significant portion of the budget, larger and more severe budget cuts are inevitable in the support and administrative areas. This effect is illustrated in Table 5.2.

In the original budget shown in Table 5.2, instruction constitutes 70 percent of the total amount. A 10 percent budget cut that excludes instruction would require other areas to reduce their expenditures by one-third. If instruction were included in the reductions at a rate of 5 percent, reductions for the balance would still be greater than 20 percent. Including instruction in the reductions equally results in an across-the-board reduction of 10 percent.

Eliminate "nonessential" programs. Some of the programs and services provided by school districts are not required by statute or regulation. Since they are

4. See *Journal of Education Finance* 13 (Winter 1988) for a review of issues related to facilities costs for school districts, including cost of deferred maintenance.

TABLE 5.2

Impact of 10% Total Budget Reduction on Major Expenditure Areas

	Instruction Support	Instruction Support	Operations	Admin.	Total
Original Budget					
Amount	$700,000	$70,000	$150,000	$80,000	$1,000,000
Share of Budget	70.0%	7.0%	15.0%	8.0%	100.0%
10% Total Budget Reduction EXCLUDING Instruction					
% Reduction of Area	0.0%	-33.3%	-33.3%	-33.3%	-10.0%
Amount	$700,000	$46,667	$100,000	$53,333	$900,000
Share of Budget	77.8%	5.2%	11.1%	5.9%	90.0%
10% Total Budget Reduction INCLUDING Instruction at Lower Level					
% Reduction of Area	-5.0%	-21.7%	-21.7%	-21.7%	-10.0%
Amount	$665,000	$54,833	$117,500	$62,667	$900,000
Share of Budget	73.9%	6.1%	13.1%	7.0%	90.0%
10% Total Budget Reduction INCLUDING Instruction Equally					
% Reduction of Area	-10.0%	-10.0%	-10.0%	-10.0%	-10.0%
Amount	$630,000	$63,000	$135,000	$72,000	$900,000
Share of Budget	70.0%	7.0%	15.0%	8.0%	90.0%

not mandatory, the district has the option of reducing or eliminating these "nonessential" services, even though they may be helpful and may have come to be expected by the public. While the list will vary from state to state, examples of nonmandated programs may include home-to-school transportation, food services, intramurals, athletics, and student body activities. On the instructional side, the list could be broadened to include elective courses not required for graduation. However, the elimination of many of the services listed above would certainly cause significant controversy and potential political problems for the district

In contrast to across-the-board cuts, this approach makes selective reductions. They target some programs for deep cuts or elimination, while others are untouched or reduced only a little. This technique permits policy makers to identify specific budget reductions that are the farthest from the central goals of the district.

Reduce instructional programs. The final type of budget reduction is to reduce programs and positions in the instructional area. These reductions are typically saved for last. If the amounts to be cut are significant, however, they often cannot be avoided. Education is a labor-intensive business. Eighty percent or more of a district's costs of education are for personnel related expenditures, and the bulk of these are in

the instructional area. Consequently, for large budget reductions, it is almost inevitable that instructional personnel will be reduced. This reduction-in-force will result in eliminated class offerings for students, increased class sizes, and greater instructional caseloads for the remaining staff, all of which are undesirable conditions.

Immediate versus Long-Term Reductions

In contrast to budget reductions that affect either the current year or the budget year in development, some budget reduction activities will have an impact in future years. These are adjustments that decrease expenditures in the long term. Rather than showing immediate returns, these activities invest current budget dollars in cost saving equipment, training or retraining, or start-up requirements. While these reduction activities generally will not help in cutting the current budget, they are expected to yield savings in the future. If the district is in a budget-cutting mode by necessity, then such projects are difficult to justify in the current year, despite the significant cost savings anticipated in future years. In any event, the district should carefully analyze any such request to ensure that the long-term savings justify the current costs. An analysis of the anticipated investment and subsequent future year savings should include net present value calculations to account for the time value of money to the district.[5]

Budget Reductions through Improved Efficiencies

These are reductions in district expenditures that result from changes in operating procedures. They encompass reductions from reduced prices, increased productivity, and deferred spending from the continuum in Table 5.1. Their common characteristic is that they have relatively little direct impact on the instructional program or student services in the immediate future. Some of the most prominent examples are described below.[6]

Energy conservation. Energy costs are among those rising most rapidly. An energy conservation program can yield large dollar saving. Not heating or lighting unused spaces and lowering thermostat settings are two of the most common and simplest activities in this area. The local power company is a source for information and energy-saving suggestions, and they will frequently conduct an energy audit for large users.

School districts may also want to investigate energy saving devices that will increase costs in the short term, but reduce costs in later years. Examples include switching to fluorescent lighting, weatherizing buildings, weather-stripping doors,

5. For a discussion of net present value concepts and techniques see Edith Stokey and Richard Zeckhauser, *A Primer for Policy Analysis* (New York: Norton, 1978), Chapter 10.

6. Many of the examples are derived from Oregon Department of Education, *Managing Costs Creatively* (Salem, OR: Oregon Department of Education, 1982) which provides an excellent compilation of cost-saving measures of all types. Another useful source for cost reduction practices is *School Business Affairs*, for example, see the November 1995 issue on Cost Cutting.

and investing in double-glazed windows, additional insulation, landscaping, and solar energy generation.

Risk management.[7] Insurance costs are also among the most rapidly increasing district expenditures. Typically, school districts require a variety of policies to cover different types of risks: property and casualty, group health, student accident, automobile, other vehicle, errors and omissions, boiler, computer, workmen's compensation, unemployment compensation, vandalism, and liability. The district's existing insurance coverage in each of these areas should be examined for appropriateness and adjusted, if necessary. Competitive bidding should be used to obtain the lowest cost consistent with the coverage specifications.

A self-insurance component to the program may reduce premiums significantly. This can be done through high-deductible amounts for certain policies and through a self-insurance consortium in which several districts pay into a funding pool that is used to cover member losses.

Purchasing.[8] Competitive bidding for necessary items can result in cost savings in a market where there are several suppliers. Volume purchasing, made possible by several smaller districts pooling their purchase requests, can give the consortium additional power to negotiate lower prices with suppliers. The tradeoff in a consortium is the need for member districts to agree upon a particular brand or product for common items in their purchase requests. The individual items may be minor (e.g., ballpoint pens, grade of paper), but participating in the consortium may require some members to make changes from particular products that are familiar and comfortable for them.

Privatization. Other terms for privatization include contracting-out or make or buy decisions.[9] The concept refers to the district choice of whether to provide the service in-house with its own personnel or to contract with an outside company. A 1996 survey of school business officials identified the most and least likely services to be privatized.[10]

Most Likely	Least Likely
Architectural Services	Budgeting
Legal Services	School-based General Services
Heavy Maintenance	District-based General Services
Computer Maintenance	School-based Instructional Services
Risk Management	Accounting

7. For a description of risk management issues and practices, see R. Craig Wood, David C. Thompson, Lawrence O. Picus, and Don I. Tharpe, *Principles of School Business Management*, 2nd edition (Reston, VA: Association of School Business Officials International, 1995), Chapter 19.

8. For a description of the purchasing process, see Wood, et al., *Principles of School Business Management*, Chapter 20.

9. Myron Lieberman, "Do School Boards Still Have Options? The Erosion of Management Authority," *School Business Affairs* vol. 63 no. 1 (January 1997), pp. 3-13.

10. Kenneth R. Stevenson and R. Craig Wood, "What Administrators Are Saying (and Doing) About Privatization," *School Business Affairs* vol. 63 no. 1 (January 1997), pp. 14-21.

There has been much less use of privatization in the instructional areas than in support services. The same survey indicated that approximately 95 percent of the respondents' districts had not contracted-out school operations nor were likely to in the next five years. The only instructional or instructional support areas identified as having a high degree of privatization were special educational services and psychological services.

Whether for support or instructional functions, there are many more considerations than cost when deciding whether to provide or contract-out the service. The quality of service, control over the timing, ability to make rapid adjustments in schedules, and selection and qualifications of personnel are also part of the decision. The primary concern noted by the business managers in the survey was balancing cost savings and quality of service, particularly the fear that short-term cost savings would be eroded by longer-term reductions in quality. Other concerns were the effect on employees that were laid off and the subsequent economic impact on the community, difficulties with unions and collective bargaining contracts, control of operations and flexibility to meet unusual or emergency situations, and the lack of suitable contractors in rural areas.

Training for operations and support staff. Inservice training for classified personnel can increase both their productivity and efficiency. For example, cost savings are possible through less waste and spoilage in the food service operations, through reduced fuel consumption by district vehicles, more efficient procedures in district warehouse operations, and faster turnaround time for repairs in the district maintenance shop.

Deferral of expenditures. Delaying some expenditures is a widely used tactic for reducing a budget. Typically, maintenance and capital outlay are areas that experience deferrals. While it may be expedient or even necessary to defer maintenance or new capital outlay requests, this is a short-term strategy. In the end, it can be very expensive to correct the results of many years of deferred maintenance. Repeated yearly deferrals open the possibility of serious damage to facilities through inattention. Delays in purchasing new capital equipment mean that the district students and employees work with possibly outdated and inefficient existing equipment.

Use of more efficient procedures or equipment. In some cases it is possible to increase the utilization of existing equipment or facilities by modifying operating procedures. This can allow a decrease in costs, prevent an increase in costs, or even provide an increase in service for the same expenditure. Several examples of this type of opportunity are found in the transportation area. Staggering school starting and dismissal times within the district can allow school buses to make multiple runs in both the morning and afternoon. With this procedure fewer buses and drivers are required, and the process operates more cost efficiently. Other possibilities in transportation include using newly developed computer

programs to determine the most efficient routes for buses and using diesel fuel rather than gasoline buses to lower operation and maintenance costs.

Similar opportunities for improving the efficiency of other district operations may exist in instruction (coordination of specialized courses, such as in the science curriculum), school administration (student scheduling for maximum utilization of scarce or expensive equipment and facilities), and district administration (reorganizing administrative and classified staff to reduce the total number of personnel while performing the same functions).

Early retirement for long-term staff. If long-term staff members retire and are replaced by less senior personnel the district may recognize some significant cost savings. This is particularly true in the instructional area where teachers at the top of the salary schedule are paid approximately twice the amount of beginning teachers. The difference between the top-level salaries and the beginning ones leaves significant money available to provide incentives for early retirement, yet still obtain overall cost savings in personnel.[11]

Caution should be exercised in using this strategy, however. A wholesale turnover of senior staff would deplete the district of many of its most experienced and valuable teachers and other staff. Rebuilding both the credibility and competence of the district personnel could be a difficult and long-term process.

Lower salary increases. A potentially cost-effective expenditure reduction, but one that may be politically difficult to achieve, is to lower salary increases. For example, a 2 percent overall increase in the district's teacher salary schedule instead of 5 percent will save the district a significant amount. With no other changes, there will be the same number of instructional personnel next year and, for the most part, the same people in the classrooms. Except for some possible loss in morale, instructional services should not be greatly affected. All instructional personnel who have increased their educational level or are not at the maximum number of years on the salary schedule will receive additional step increases as they move through the schedule so their actual increases will be greater than the 2 percent schedule increase. The same tactic can be applied to other employees as well. In fact, if the major employee group—teachers—is to accept a lower increase, it may be necessary that other groups, such as administrators and classified employees, receive similar treatment.

Reduction of cash carryover amount. The cash carryover or unencumbered fund balance is the amount of money the district has budgeted to end the fiscal year. This money will be used to meet the district's obligations until revenues are received in the coming year and serves as a contingency fund for unexpected events during the year. A normal amount for an unencumbered fund balance is between 4 percent and 12 percent of the district's total expenditures. The exact level will depend on the age and condition of district facilities, board

11. Herb R. Brown and J. Theodore Repa, "Do Early Outs Work Out? Teacher Early Retirement Incentive Plans" *School Business Affairs* vol. 59, no. 8 (August 1993), pp. 12-16.

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policies, stability of other revenue sources, historical fund balance levels, and community attitudes.[12]

The cash carryover is a regular and ongoing item in the budget and provides a transition from one budget year to the next. The current year's cash carryover reduces the need for other revenues in the next or budget year, and next year's cash carryover amount reduces the need for other revenues the following year. If the cash carryover amounts are similar from year to year, there is little net impact on the budget. This year's cash carryover is treated as a revenue in the budget for the upcoming year and is largely offset by the projected ending cash carryover amount, which is treated as an expenditure in the same budget.

However, a lesser amount budgeted for the ending cash carryover for next year is the equivalent to a one-year expenditure reduction for the coming year. If the district can operate adequately with a lower cash carryover amount, the net effect is a reduced total budget. Unless the district intends to maintain this lower amount permanently, this is a short-term strategy. The following year's expenditures will have to be increased beyond their normal level if the cash carryover amount is to be built up again.

Budget Reductions through Program Reductions

Another approach to decreasing the budget is reducing the quantity or quality of programs and services the school district offers. Budget reductions of this type result in a lower level of service. The lower cost corresponds to a reduction in district operations. These are the most painful budget cuts to make because they directly affect the operations of the district. However, they are sometimes necessary to keep the planned expenditures in line with the estimated revenues.

If it becomes necessary to employ program reductions, it is frequently helpful to illustrate their effect in programmatic terms. This makes the school board members, who are ordering the reductions, or the district patrons, who may be unwilling to vote for a higher budget levy, aware of the changes in program operations that will result from the lower budget. For example, descriptions—such as an increase in average class size from 20 to 23 students at the elementary level; 92 teachers laid off; or 450 high school students unable to take advanced science, mathematics, and foreign language courses—put the results of a programmatic reduction into immediate educational and human terms. Programmatic measures convey the real meaning of the budget reductions much more thoroughly than do dollar or percentage amounts.

Reduction of instructional staff. The largest single expenditure in school districts is for instructional personnel. As a result if significant budget reductions

12. Sandra R. Vidlicka and William Hartman, "How Much Is Enough? Sizing a District's Fund Balance" *School Business Affairs* vol. 60, no. 2 (February 1994), pp. 4-9.

are required, a reduction in instructional staff will have to be considered. Eliminating teaching positions increases the number of students per classroom. Reducing the number of other direct instructional staff, such as remedial reading teachers, restricts the services provided by these personnel and places additional burdens on the classroom teachers.

The least disruptive means of reducing staff is by attrition; that is, by not replacing staff members who leave their positions for retirement or other reasons. However, the vacated positions may not match the areas in which reductions are desired, and this strategy may result in shifts in assignments, if possible, for the remaining personnel.

If additional reductions are needed, the district may need to lay off some teachers. Usually the district has established reduction-in-force policies for determining the order of layoff, primarily based on seniority. The remaining, more senior teachers may be required to change their existing teaching assignments to match those available in the district. The result can be a "bumping" process in which highly qualified teachers in some areas are replaced by marginally qualified, but more senior teachers. Personnel layoffs are a difficult and painful process with potentially negative educational results.

Reduction of course offerings. One of the common impacts of staff reduction is a corresponding reduction in the number and variety of courses offered, particularly at the high school level. With fewer classroom teachers, decisions have to be made how to utilize those available positions. Frequently, low enrollment courses are the first eliminated. These typically are the advanced and elective courses. While not as many students are affected by this approach, those that are lose needed instructional opportunities.

Another means of reducing the number of classes to match the available teaching staff is to reduce the number of sections offered of the required or core classes such as math, English, science, or social studies. The net effect is to increase the class size of the remaining sections. For example, a high school with 500 ninth graders, each of whom is required to take an English class, would require 20 sections of English, with an average class size of 25 students. If only 17 sections were offered, the average class size would be over 29 students, and three teaching periods (or approximately one half-time position) would be eliminated.

Some of the teaching time freed up by larger class sizes in required courses can be used to offer other courses, such as electives, which otherwise would not be available. This tactic does not maximize the reduction in the number of teaching positions, however, nor the budget reduction. It represents a partial shift of budget resources and transfers the burden of reduced service quality through higher class sizes to a larger number of students so the district can provide additional instruction to a smaller group. This approach does, however provide, administrators a potentially attractive proposal for some teachers. In return for larger class sizes in

required courses, they will also be assigned to teach smaller, specialized classes more to their interests.

Reduction of support staff. A common place for districts to look for reductions is among the support activities provided to students and instructional staff. A rationale for reductions in these areas is that they are not directly involved in instruction and that the students' educational programs will be less affected by cuts here. This may be true in the short run, but the long-term effects of fewer guidance counselors, librarians, school psychologists, school social workers, school nurses, speech pathologists, audio-visual specialists, and computer-based instruction specialists certainly affect the educational programs provided in the district. Fewer services will be available to students and those services that are provided may be oversubscribed by students. Further, if teachers are called upon to provide some of the activities previously carried out by support staff, they will have less time for instruction, and students will receive services from persons not necessarily trained in those areas.

Reduction of administrative staff. Even more popular than decreasing support staff is the call to reduce administrators in the district. "Get rid of the administrative fat in the district budget" is a common demand. This stems from a widespread assumptions that administrators add very little value to the educational process, that they probably hinder teachers in trying to work with their students, and as a result, that the district would generally be better off with fewer administrators. In most school districts, these assumptions are not true. Administrators are necessary to direct the district's operations, to establish and monitor policies, and to obtain and distribute resources to carry out the educational programs of the district.

However, administration is not immune from budget cuts. If instructional programs are being cut, it may be appropriate from several perspectives to cut administrative expenditures as well. District priorities properly favor instructional activities and administrative expenditures are considered less crucial to the students' welfare. Politically, administrative budgets often need to show reductions at least as great as those in instruction to counter charges of administrators firing teachers to protect their own positions.

Like other areas, if administrative positions are reduced there will also be a reduction in the services provided. A district office with fewer people has less capacity. Some efficiencies may be recognized if there is an excess of staff, but some activities may have to be eliminated or reduced. At the school level, there are also possibilities for reducing administrative staff, but with corresponding reductions in services. For example, vice principal positions can be reduced from three to two in high schools, secretarial positions can be cut back, one principal can be responsible for two smaller elementary schools. The schools will still function under these conditions, but the remaining personnel will need to extend their activities to include the essential elements of the eliminated positions. This may

affect their ability to carry out their expanded responsibilities adequately.

Reduction of nonessential services. State requirements mandate that school districts provide certain educational and related services in their operation. However, districts typically go beyond the basics to provide other services, which although not legally mandated, are deemed beneficial to the educational process. Examples of common, but not strictly required services could include home-to-school transportation, interscholastic athletics, and most extracurricular activities. A reduction or elimination of some of these activities will also reduce the expenditures for them and, in turn, reduce the district's budget.

An increase in the walking distance to school from one-half mile to one mile will decrease the number of students transported daily, require fewer school buses in operation, and reduce the district's transportation expenditures. Athletics and club activities are an important aspect of many districts' overall program, providing significant educational, social, and public relations value. They are, however, generally optional activities, not required by state statutes or regulations.

If the district is facing a severe fiscal crisis, the first in line for funding are the mandated items. Nonmandated activities, no matter how important to the district, cannot take precedence over those legally required. Unfortunately, district patrons do not always understand this distinction, and district warnings about the possibility of cutting football and basketball programs are sometimes viewed as threats to force voters to approve district tax levies or budgets.

Increasing Revenues to Avoid Expenditure Reductions

Increasing revenues is an alternative that has the same impact on balancing the district budget as reducing expenditures. The additional revenues will support activities that otherwise would be eliminated to balance the budget. Assuming that the district is levying the maximum property tax available and that the amount of state aid provided the district is fixed, other potential sources of revenue are somewhat limited and mostly focused on local revenue sources. However, some additional revenue raising activities are not insignificant and can make it possible for desired district programs to be continued and improved.

Improved cash management.[13] The receipt of revenues by the district and the need for cash to pay its obligations are not usually simultaneous. State aid comes in regular intervals during the school year and property tax payments are generally received only during several periods. On the other hand, most district expenditures occur in a steadier monthly pattern. This nonmatching of revenues and expenditures creates times during the school year when the district has excess cash in its accounts and other times when it is short of money.

13 Wood, et al., *Principles of School Business Management*, Chapter 13, provides a description of the concepts, terminology, and practices of school district cash management.

A cash management system is designed to smooth out these differences and to earn the district additional revenues at the same time. This is done by investing the excess cash in interest earning short-term investments and withdrawing it as needed to pay obligations when they are due. An effective cash management system will always have cash available as needed, but it will also maximize the yield on the investments made by the district and lower the district's borrowing costs, if any. The interest amounts earned through improved cash management provide additional revenue to the district and can be used to maintain programs or activities which otherwise would be reduced.

Charges for services provided. A school district may provide certain services to other districts or to other public or private agencies. Examples of such services could include regular education programs, special education programs, specialized classes, purchasing, management information and data processing systems, printing, vehicle maintenance, and transportation. Typically, the providing district is already engaged in the activity for its own students and is able to incorporate students or work activities from other districts or agencies into its own operation efficiently through economies of scale. The charges for these services should be reviewed to see if they are appropriate or if some modification needs to be made. Charges that are too low mean that the providing district is subsidizing other agencies' operations, while charges that are too high may be inhibiting additional agencies from purchasing services from the district. At a minimum, the charges should cover the direct costs of the providing district and more appropriately would include the indirect or overhead costs associated with the activity.

Charges for nonacademic activities. Certain activities are not required in the academic program, but are optional for students. Even so, the activities require expenditures and students benefit from them. Primary among these are athletics, although there are a number of extracurricular activities that also fall into this category. One approach to offset some of the expenditures is to charge a participation fee for students, such as an athletic fee for playing a sport. While revenues from such fees will probably not cover the full cost of providing the activity, they do reduce the cost to the district. However, care must be taken that low-income students are not prohibited from participating in fee activities. This can be done by using a sliding scale fee structure or having a fee waiver policy based on family income.

Another revenue raising tactic, particularly in high schools where extracurricular activities are numerous, is to charge a fee to all students for a student body card. The revenues are used to finance extracurricular activities, and the possession of a card admits students into school events. Again, provisions should be made for low income students to obtain reduced cost or free cards.

Support from private sector. A frequently untapped resource for school districts is the local business community. There has been a significant upswing in

school-business partnerships in recent years as the corporate community has taken a greater interest in assisting schools and in promoting school reform.[14] Approached properly, individual businesses and organizations may be willing to contribute to the school district. Such contributions can be in a variety of forms: unrestricted grants, funds for specific purposes or items, new or used equipment, supplies, and personnel. These donations can replace expenditures that otherwise would have been necessary, and they can maintain and expand existing activities or initiate new ones. The donations are generally tax-deductible for the businesses and the publicity value can be used as a further selling point in soliciting contributions.

Volunteers. School district patrons have many different talents and skills they may be persuaded to provide the school district for use in its operations. Classroom and library aides are common examples of areas in which volunteers can provide useful assistance in the instructional area. Other examples include a piano accompanist for music teachers, craft demonstrations and instruction, story and poetry readings, special tutoring, and nurse's aide. Extracurricular activities can also benefit from volunteers to provide specific skill training, supervision, and additional labor as needed. Payoffs to the volunteers range from obtaining experience that can be used for later employment to public recognition of their contributions. An active program that encourages, recognizes, and rewards volunteers can pay significant benefits in the form of additional resources and lower costs to the school district.

Budget Reduction Process

Budget reductions do not happen automatically. Decisions—often difficult ones—must be made among alternative types of reductions and among the programs affected. The process of managing budget reductions is an important one—both for the ultimate effect on the district's educational program and for obtaining staff and community support for the necessary cuts. The questions of what type of process to use to reduce the budget and how to implement the process are crucial for school administrators facing this task.

The overall process for deciding on budget reductions can range from a directive issued by the school board or district superintendent to district staff involvement to community participation. The procedures used will depend on several factors. The magnitude of the cuts required is a key issue. Minor reductions that will not affect programs significantly do not call for elaborate, high involvement processes. Small reductions may be handled most efficiently by the district administration with input from school building staff and central office administrators. On the other hand, if the reductions are significant and will require

14. See *School Business Affairs* vol. 62, no. 8 (August 1996) for a review of school-business partnerships issues.

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elimination of or large scale reductions in district programs, then it is logical to consider involving the community in reaching the decisions.

The budget development process will also influence the budget reduction process. If budget requests have been prioritized, then reductions can be based on eliminating the lowest priority items in the original budget. Further, if the community, through budget committees and hearings, has an expectation for participating in budgetary decisions, it is both useful and politically wise to include community representation in the budget reduction process as well.

The district's history and tradition are also important in establishing a budget reduction process. If the need to make reductions is a regular occurrence, district staff and the community will have experience in the process and expectations about how to proceed. A district facing substantial reductions for the first time may find it necessary to communicate the magnitude and seriousness of the reductions to both staff and community as a first step in initiating the budget reduction process.

Reductions tend to bring out fears in those potentially affected. This can lead to protective behavior for individual programs and conflicts among various factions in the district and community. Old animosities can surface and contaminate an already difficult process. While the past cannot be changed, focusing on a rational and equitable basis and process for deciding budget cuts can help to minimize friction.

The stage in the overall budget process when the reductions have to be made will also affect the design of the process. If the need for cuts becomes known before the budget has been completed, then the budget development procedures will be used to reduce the proposed expenditures to achieve a balanced budget. This, in effect, becomes another iteration in the budget development process. However, if the budget must be reduced during the operating year because of short falls or revenue or unanticipated expenses, there may not be time to implement a full-fledged participatory process. In this case, reduction decisions are typically made by administrators with input from district staff and are approved by the school board with input from the community.

Criteria for Budget Reduction Process

To avoid many of the difficulties common to budget reduction efforts, it is helpful to establish principles or criteria to guide the process when conflict arises over either the procedures or the specific reductions. This gives administrators a basis for resolving disagreements and for keeping the process on track. One set of criteria, developed by a large school district facing significant budget cuts, follows. As is clear from the criteria, this district chose a process that involved administrators, district staff, and widespread citizen participation.

1. Budget reductions should be based on principles that make clear the basis for all final decisions by the board of education.
2. Multiple opportunities should be provided for citizens to express themselves about budget priorities at the local school level as well as at the district level.
3. Budget reductions with district-wide effects should be recommended at the superintendent's level.
4. Principals and department heads should recommend specific budget reductions in programs and services within their respective operations, tempered by district-wide considerations.
5. Ultimately, a full range of options for budget reductions should be administratively determined using citizen input tempered by professional judgments.
6. The board of education should have available multiple options and related impact statements in making final decisions about specific budget reductions.[15]

Concentric Circles Approach to Budget Reduction

One approach to putting these criteria to work is provided by the Concentric Circles methodology.[16] This approach emphasizes the values participants place on the different components of the district's instructional, support, and operations activities. Further, it frames the discussion of reductions around the contribution of each element to the basic mission of the district—teaching and learning—and away from personalities and turf battles.

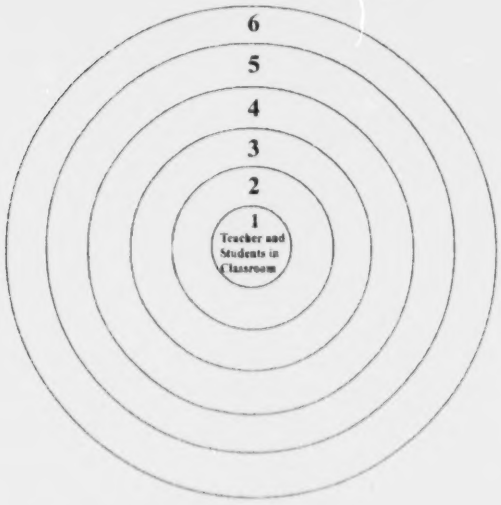
To start this process, all district budget elements are located in one of six circles that best represent their activities as either instruction, instructional support, or operations support at the school or district level. The circles or categories are shown in Figure 5.1. This placement is done by the administrators in charge of making initial budget decisions.

The core of the district's educational mission—classroom instruction—is at the center of the diagram, and activities that provide instructional and operational support at the school and district levels are shown progressively farther away from the center. Being placed in an outer circle, such as district-based activities in circles 4-6, does not mean that the activity is not important or even essential, but only that the activity is located further away from the classroom than other school-based activities. For example, business management and personnel functions are

15. Victor Doherty and James Fenwick, "Can Budget Reduction Be Rational?" Educational Leadership January 1982), pp. 253-257.

16. William T. Hartman and Seldon V. Whitaker, Jr., Using the Concentric Circles Approach to Prioritize Budget Reductions. Paper presented at the annual meeting of the Association of School Business Officials International, Philadelphia, PA. November 1996.

FIGURE 5.1
Concentric Circles Diagram



2 = School-Based Instructional Support
3 = School-Based Operations Support
4 = District-Level Instructional Support
5 = District-Level Operations Support
6 = Other District Programs

needed to administer the district, even though they are at the district level.

Analysis of items for budget reduction begins in the outer circle, #6 Other District Programs, and continues until all feasible items in that circle have been reduced or eliminated. The process then moves to the next lower circle and continues until the necessary reductions are identified. The budget is then reformulated and the proposed reductions are presented to the school board for approval. The board discussion is also focused on the relationship of the budget items to the educational mission of the district and decisions are made within that context.

Not all items in Circle 6 can or should be eliminated before considering items in circles nearer the center, and not all items in Circle 1 are sacrosanct and untouchable. However, those items in the outer circles face greater scrutiny during times of budget reduction.

Limitations on the Budget Reduction Process

Even with a well-developed rationale for the reduction process and a firm administrative resolve to conduct it in an equitable and participatory manner, there are significant limitations on the process and level of participation. District contracts with employee groups may direct the procedures for any personnel reduction-in-force or layoffs that are selected. Further, individual personnel decisions are

almost always made administratively. Most administrators feel that it is inappropriate—and in some cases, may not be legally permissible under collective bargaining contracts—to share personnel decisions with colleagues of those affected.

The timing for making reduction decisions may also restrict outside participation. Decisions that have to be made quickly limit district administrators' ability to involve others, while decisions with long lead times allow more opportunity for participation. For example, the district may receive new information in early August from the state department of education announcing a reduction in the estimate of state aid provided to the district. The reduced revenue estimate unbalances the budget. Further, in this case, it arrives when teachers are not on duty and many patrons are out of town. To rebalance the budget before school begins, district administrators together with school principals may unilaterally decide, with school board approval, to reduce supply and material allocations below those previously approved. With longer timelines, school districts may select a different process and include district staff, parents, students, and community members in the decision.

A final limitation is the logistics of information. The more people involved, the more difficult it is to see that all have and understand the necessary financial and programmatic data to make the cuts in a knowledgeable fashion. A process involving large numbers of people analyzing significant budget reductions requires significant planning and a lengthy period of time to complete successfully. On the other hand, implementing small reductions will likely involve only a few people and can be carried out relatively quickly.

Summary

Whenever expenditures exceed revenues, a school district is required to take some corrective action. This can be in the form of raising additional revenues, but the most common action is to reduce expenditures. There are two primary types of budget reductions: those resulting from greater efficiencies in district operation and those requiring program reductions. Efficiency-oriented reductions are generally the first choice of administrators because they leave the district's programs and services intact. However, if the required reductions are large, it may become necessary to implement program reductions to bring expenditures back into line with revenues.

If actual operating results differ significantly from those projected, reductions may be required during the development process, when the next year's budget is being assembled, or during the school year. Whenever budget reduction is necessary, school administrators need to adopt an appropriate process to determine the size of the cuts and where they will be made. The process may involve a full-blown citizen participation effort if the required reductions are significant and

there is time to implement the process. If time is short and the cuts are not too great or potentially disruptive, then the process may be less participatory involving mostly administrators and the board of education with district staff input.

However before the process is implemented, administrators must have a clear understanding of the budget reductions they want to accomplish and how they intend to create and manage the decision process. Two administrators, who directed a major budget reduction process in a large urban school district, provide good advice:

> *"Clear, concise information that distinguishes among instruction, support, and management functions, together with accompanying "impact statements" that give precise information about lost services, staff reductions, and other variables, become invaluable administrative and board tools in the decision-making process. The additional contributions of citizen budget committees provide a critical perspective by which the administration and board of education can test their perceptions of what is of ultimate importance to the welfare of children."*[17]

Problems

1. Budget Reduction in Dunn School District

   Shortly after Dr. Kirk had completed her budget for the special education programs in Dunn School District, the tax levy for the district was defeated by a substantial margin. (See Chapter 4, Problem 4, Special Education in Dunn School District, for budget data for this problem.) The following week in a memorandum to all principals and department heads, the superintendent announced that substantial reductions must be made in the district's budget before resubmitting the tax levy to the voters at the next election date in two months. The memorandum provided specific targets for each budget area. By prorating the total dollar reduction target for the general fund among the district's various programs, the maximum allowable budget for the three special education programs in Dunn School District was set at $1,000,000.

   Prepare a revised budget for the special education programs in Dunn School District to stay within this reduced budget target. Use a standard budget format with account codes and titles as well as amounts. Include your calculations as a separate worksheet attachment. For presenta-

17. Doherty and Fenwick, "Can Budget Reduction Be Rational?" p.257.

tion purposes, show the account code, account title, original budget amount, amount of reduction, revised budget amount, and a brief comment on the rationale and means of each reduction. Use the format below as a guide.

Account Code	Account Title	Original Budget	Reduction	Revised Budget	Comment
XXX	Name	$XX,XXX	$YY,YYY	$ZZ,ZZZ	Reason for reduction

Dr. Kirk was unsure where to begin reducing the special education budget. She knew that the district had contacted the teachers' association and the association president stated that they were unwilling to renegotiate the salary increase or benefit provisions of the new contract. Further, shortly after the superintendent's memorandum, she received a call from POPHS (Parents of Physically Handicapped Students) expressing concern that special education programs and students might be forced to endure cost reductions. The president of POPHS reminded her that both federal and state laws required the district to provide an appropriate education to handicapped students and that the programs established for the physically handicapped students, including physical therapy and transportation, had been written into each child's educational plan by the district as necessary.

2. Fund Balance. Shown below is the outline of a district's beginning financial situation in 1997-88 and other information about the expected revenues, expenditures, and value per mill for the following four years. Complete the missing information under three separate conditions:
   a. Use the fund balance to avoid a tax increase in real estate millage as long as possible.
   b. Levy a small annual increase of 4 mills in real estate millage per year beginning in 1998-99 and continuing as long as possible.
   c. Levy the necessary real estate millage each year to have no change in fund balance (until the final year to meet 5 percent criterion).

   Four conditions apply to each simulation: 1) the budget must balance each year; 2) fund balance cannot be negative in any year; 3) if possible, the district intends to levy a real estate tax of 100 mills in 1997-98; and 4) the ending fund balance in the final year will be 5 percent of total current expenditures. Note that the ending fund balance in one year is identical to the beginning fund balance the following year.

What differences do you see among the three different approaches? What advantages and disadvantages does each one have? Which approach would you recommend to your school board and why?

CONDITION # _____

YEAR	1997-98	1998-99	1999-00	2000-01	2001-02
BEGINNING FB	80,000				
CURRENT REVENUE (W/O R.E. TAXES)	575,000	600,000	625,000	650,000	675,000
R.E. TAXES					
TOTAL CURRENT REVENUE					
TOTAL CURRENT EXPENDITURES	1,000,000	1,050,000	1,100,000	1,150,000	1,200,000
USE OF FB (CR - CE)					
ENDING FB					
R.E. MILLAGE					
VALUE PER MILL	4,000	4,100	4,200	4,300	4,400

3. Indicate the appropriate circle for each of the items listed below using the Concentric Circle classification scheme.
   a) Mini-grants for teachers.
   b) Subsidy for food service employee benefits.
   c) Curriculum development funds.
   d) Subsidy for athletic physical examinations.
   e) Advertising for teacher recruitment.
   f) Gifted and talented specialists
   g) Custodial supplies
   h) Assistant Director of Community Education
   i) Dental hygienist
   j) Building level secretarial positions
   k) Nursing staff positions

l) Elementary and secondary school intramurals
m) Teacher/pupil staffing ratios
n) Textbooks
o) Transportation equipment

Notes

Marketing the Budget 6

Introduction

At first glance, "marketing" may seem an inappropriate topic for budgeting, particularly in school districts. However, a short reflection should reveal the vital part that marketing the budget must play in an effective budgeting process. In the private sector, the concept of marketing is concerned with convincing people to purchase your product or service. In education, marketing the budget means communicating important budget information to the various stakeholders and convincing them to support the educational program and the budget through local taxes. The budget must be marketed to many audiences. These include the school board, parents, influential community members, taxpayers, voters, and the media.

Schools are under greater scrutiny than ever before. A number of issues are interacting to create an increasingly skeptical and even hostile public. Among the most noticeable are the negative public perception of school performance, which is often more perceived than real:[1] business demands for greater productivity and increased focus on workforce preparation;[2] a political climate suspicious of the role of government in education; pressures to privatize more school functions, including instruction;[3] and continuing calls for accountability, which translate into responsibility for attaining student achievement results in exchange for spending tax dollars. To gain support for the budget, school officials must work to overcome these issues and create a positive perception of the budget and the district's fiscal stewardship.

This chapter concerns the concepts and activities involved in marketing the school district budget. It has several components. First, there is the need for all school districts to present the budget to the school board (or other local authority) for approval. Additional activities to gain local approval include working with the media to achieve an accurate representation of the budget to the public, and communicating with the community to solicit explicit or implicit support for the district's educational programs, associated expenditures, and taxation level needed to support them.

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1. Gerald W. Bracey, "The Fifth Bracey Report on the Condition of Public Education," *Phi Delta Kappan* (October, 1995): 147-155.

2. See 1996 National Education Summit Policy Statement (www.summit96.ibm.com); Charles Bierbauer, "Governors, business leaders tackle education woes," CNN Interactive (www.cnn.com/US/9603/education_summit/), March 26, 1996.

3. Donald R. Tetreault and Lawrence O. Picus, "School Privatization: Is There a Future?" *School Business Affairs* Vol. 62, no. 5 (May 1996), pp. 32-37.

The second component concerns only those districts in states that require a district fiscal election on all or part of the budget. In this case, the final approval of a school district's budget or property tax level is in the hands of the district's qualified voters. This section describes the budget election process and strategies for gaining support and approval of the electorate at a budget election.

Budget Presentation

After the budget document has been developed by the district administration, it needs to be shared both inside and outside the organization to communicate both the content and the meaning of the budget request. The presentation has three primary purposes: 1) to explain the contents of the budget, 2) to provide recipients with an understanding of its programmatic and fiscal implications, and 3) to gain approval for the budget request.

Presentation Guidelines

Selective overview. The large size of the typical district budget prohibits a detailed review of all elements included in the document; the volume of information is simply too extensive and would quickly become overwhelming for most individuals. Rather, a selective focus on the primary points the district administration wishes to communicate and highlight is best. These items should provide an overview of the key budget ingredients and include sufficient information for reviewers to comprehend the major fiscal elements and important trends affecting the budget.

Meritorious Budget Award (MBA) Criteria provides a useful template for selecting budget presentation items and preparing materials for meetings with the school board and others (See Chapter 1). The recommended format for the MBA includes an Executive Summary, which provides a concise overview of the document as a whole.[4] While the budget presentation's central focus is fiscal, other important organizational, educational, and community factors should be included to provide a broad informational basis and to set the budget in context.

Analysis, not just data. The most helpful summary will analyze key elements rather than just presenting data and requiring recipients to do their own analysis. In this way, the district can emphasize relevant information, make appropriate comparisons, and establish important connections between elements. For example, it is much more meaningful to highlight, "State share has declined for the past five years. District funds now support 65 percent of total costs," rather than showing tables of numbers with local and state funding amounts and percentages. Further, by featuring the most important elements in the budget, the presentation

4 Dennis Strachota, *Standards of Excellence in Budget Presentation* (Reston, VA: Association of School Business Officials, International, 1996).

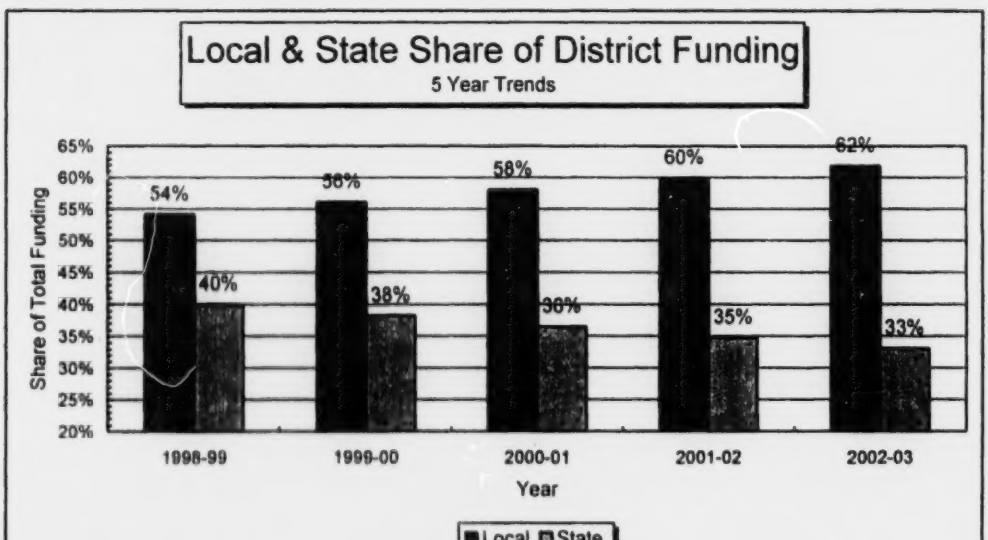
FIGURE 6.1

Presentation: Tables Compared to Graphs

Data Tables

Year	District Funding		State Funding		Federal Funding		Total
	$	%	$	%	$	%	$
1998-99	$5,125,876	54%	$3,785,883	40%	$556,321	6%	$9,468,080
1999-00	$5,638,464	56%	$3,842,671	38%	$570,229	6%	$10,051,364
2000-01	$6,202,310	58%	$3,900,311	36%	$584,485	5%	$10,687,106
2001-02	$6,822,541	60%	$3,958,816	35%	$599,097	5%	$11,380,454
2002-03	$7,504,795	62%	$4,018,198	33%	$614,074	5%	$12,137,068

Graph of Key Elements of Same Data



ensures that the district's message is heard and can focus discussion on critical areas. These highlights can be supplemented by further detail if requested by board members or others.

Graphs. For more effective communication, particularly when showing comparisons and trends, use graphs rather than tables of numbers. The visual impact is much greater, and charts illustrate the point directly instead of having the reviewer make—or fail to make—any necessary mental calculations or connections. The difference is portrayed in Figure 6.1., which clearly shows the trend of increas-

ing local share of district funding and declining state share.

Fiscal Elements

Financial data are the key elements in any budget presentation. They are the results of the budgeting process and hold substantial interest for the school board, taxpayers, and others. In addition to the fiscal projections for the upcoming budget year, it helps to have current and past years' results for comparison. Changes from current year to budget year can give reviewers both dollar and percentages differences. Important fiscal information to present include:

Revenues
- By major source: Local, State, Federal, Other
  - Data: Amounts, Share of total

Expenditures
- By major program or function
- By major object of expenditure
  - Data: Amounts, Share of total

Taxes
- By type of tax: Property, Income, Other
  - Data: Amounts and tax rates

Beyond the particular amounts, the fiscal information section should point out any significant features in the budget, identify key trends, and comment on financial aspects of interest. Through a combination of short statements, summarized data, and illustrative charts, it is possible to communicate the important fiscal aspects of the budget in a concise and understandable manner.

Key Factors and Assumptions

It takes more than financial data to communicate the need for the projected expenditures and the supporting local tax revenues. Budget presentations should also include key student, personnel, programmatic, and economic factors and assumptions that played a part in preparing the budget calculations. Among the information that might be included are:

Demographic
- Numbers of students by grade level or school level
- Enrollment trends
- Changing characteristics of the student body

Personnel
- Numbers of teachers, administrators, classified staff

Technology
- Number of computers for instruction
- Number and percent of classrooms wired for the Internet

Economic conditions
- State and local conditions affecting tax revenues
- Assessed and/or market value for taxable property
- Personal income (if a basis for local tax)
- Collection rates for local taxes

School board policy decisions
- Student/teacher ratios by school level
- Salary increases (%)
- Student/computer ratios by school level

Performance results
- Standardized test scores
- Graduation and dropout rates
- Parent/student satisfaction survey results
- Achievement of district goals

Most, if not all, of this information is included in the MBA Criteria elements. As with financial data, select the most important elements, summarize the information available, and present the data along with a brief discussion to highlight the key points.

Presentation Techniques

New computer technology offers substantial opportunities to develop and deliver convincing budget presentations. With more powerful microcomputers and an array of new software, district administrators can develop attractive and highly effective materials to use in presenting the budget to their school board and others. Incorporating a multi-media approach can enliven what traditionally has been a routine review of budget data..

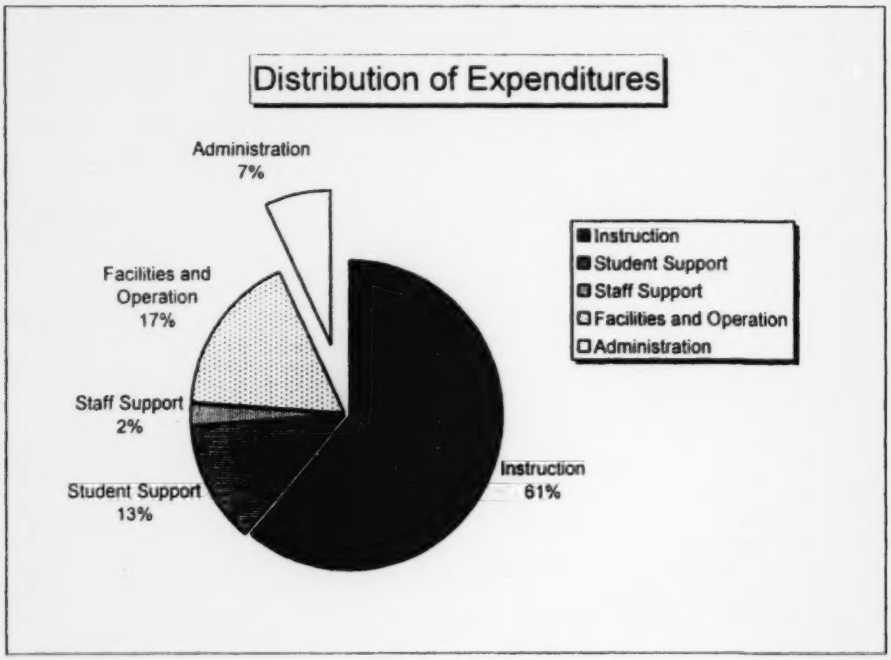
> *Financial data, clearly shown in attractive charts, graphs, linear representations, and graphic illustrations, relates directly to photographs of students, staff, buildings, and community residents. Strong visuals add interest and understanding to budget presentations. Good graphics enhance audience comprehension. Color and dimension are used to breathe life into the document.*[5]

Software used to make overhead transparencies or computer slide shows is now readily available and easy to use. The software offers many different formats and can incorporate not only text, but also illustrations, pictures, organization charts, graphs, and tables. When coupled with a laptop computer and a projection device, a polished professional quality presentation can be readily created and delivered.

5. Sharon A. Kerr, "Reaching the People: Using a Sound/Slide Budget Presentation," *School Business Affairs*, vol. 60, no. 6 (June 1994), pp. 31.

FIGURE 6.2

Example of Pie Chart Presentation



Graphical techniques can embellish numerical data and present them in interesting and striking ways. Pie charts, such as the one shown in Figure 6.2, are effective devices for showing the relative proportions of components of a whole. For example, this style of graph can demonstrate the relative amounts of the budget devoted to instruction, student support, staff support, facilities and operation, and administration. Exploding one segment can highlight it for greater attention: In this example, depicting the small proportion that administration represents of total costs can be effective in combating misperceptions of excessive administrative costs.

Bar charts provide a strong visual impact, particularly if they are not overcrowded in a single graph. The bar chart in Figure 6.3 shows that over the last six years the district's ending fund balance has grown to a relatively high level and then been drawn down to a lower level. Putting the values on top of the bars provides useful data along with the visual impact of the bar chart.

Line graphs are effective choices to illustrate trends of several related items. In the example shown in Figure 6.4, the steady rise in total property tax rate, especially over the last four years, is shown to be primarily a result of an increased millage for debt service, presumably due to a building program in the district. The grid lines in the graph and the millage values shown at each point make the graph easier to read and understand.

FIGURE 6.3

Example of Bar Chart Presentation

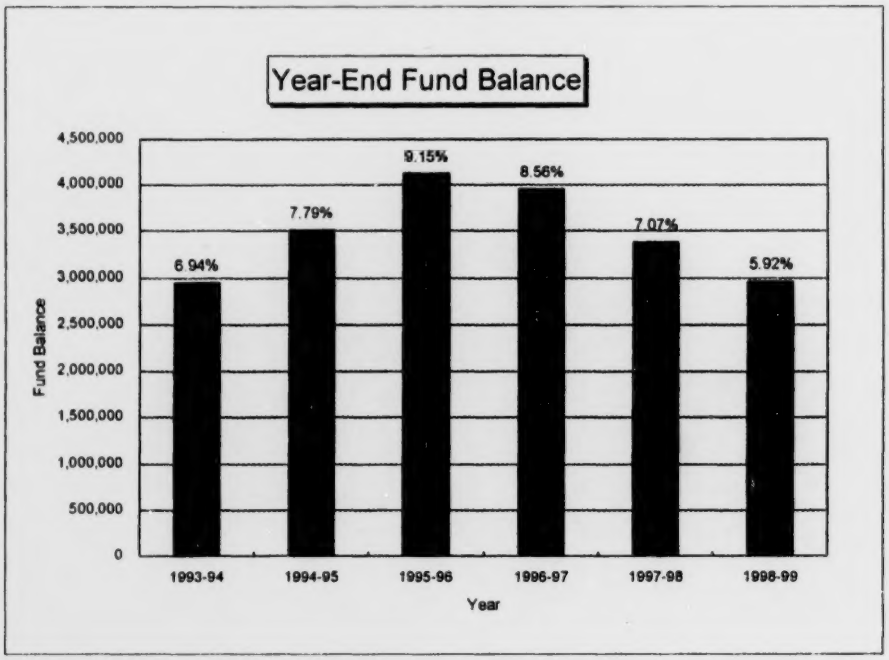
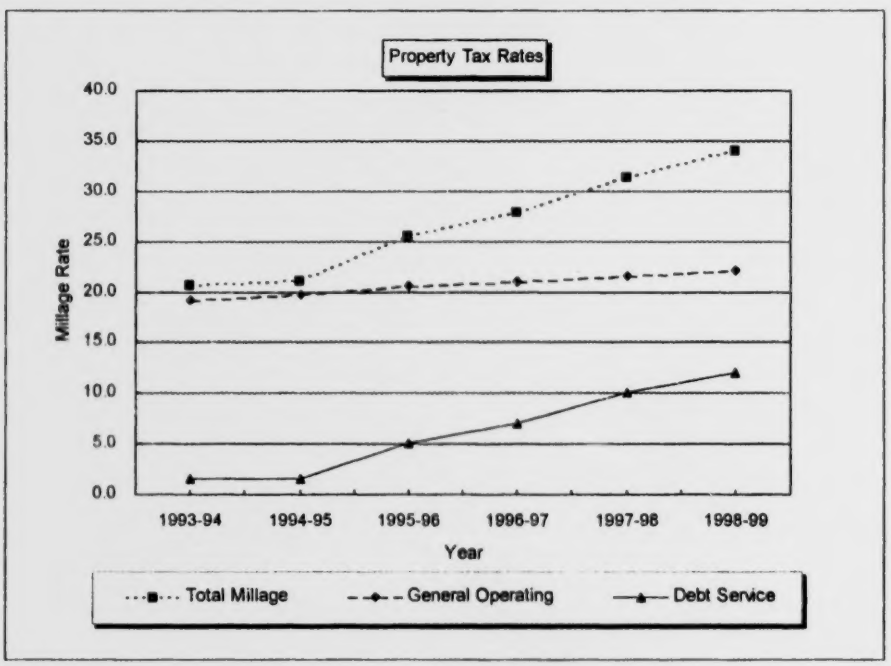


FIGURE 6.4

Example of Trend Line Chart Presentation



Working With The Media

An important component of marketing the budget is proper utilization of the media. It is through the local newspapers, radio stations, and television stations that the general public receives most of their information about their schools. Consequently, what the media report about the schools will shape the attitudes and opinions of many of the district's patrons.

Educational issues are often complex and multi-sided, and at the same time, some are emotional and highly charged. Each group views the issue and how it should be resolved from its own particular point of view. For example, taxpayer groups can be quite vocal—and sometimes unpleasant and even uncivil—about local tax increases proposed in the budget; at the same time, parents may feel strongly that program improvements, which are driving the increased expenditures, are essential for their children's education. Budget administrators are often the lightening rod for groups' dissatisfaction with the size or allocation of the budget. Unfortunately, with an uninformed or misinformed public, vocal critics can sway public sentiment and board votes toward budget actions that can harm the district's educational program.

School districts need to work with the media who serve their community to ensure that the editors and reporters covering education are adequately and accurately informed about the key programmatic and financial aspects of the district's operations. The objective for district officials is to educate media representatives and have them understand the issues from an educational point of view (i.e., the effect on students).

The key to successful communication with the media is openness and honesty. Cover-up or hiding things typically backfires; when the issues come to light, the negative reactions are worse. Further, this behavior on the part of school officials breeds distrust and suspicion in the media, which can be reflected in their reporting.

Media relations efforts are most effective if practiced on a regular and ongoing basis, rather than in a reaction to a crisis when the district may have been put in a defensive position of having to refute incorrect or extreme claims of disgruntled citizens or interest groups. A starting point is to provide all media representatives with a copy of all budget documents prepared by the district; these include the executive summary, the full budget document, and any appropriate supplemental material to provide background or context information about the district's budget. Supplement these materials with special briefing sessions for reporters and editors who cover education for local newspaper, radio, and television organizations to explain the district's educational objectives and related fiscal requirements in greater detail. Administrators can use these sessions to provide useful background information, explain district plans and actions, answer questions,

and build a better rapport with media representatives. The goal is to encourage reporters and editors to avoid simplistic interpretations of complex issues and to consider more than just controversial issues in their coverage of education. For example, if the district budget were awarded the Meritorious Budget Award, a positive article could focus on national recognition of the district's performance in the financial area.

Community Relations

Developing and maintaining community support for the school district and the budget is an ongoing task. It involves many different aspects and activities—and all district personnel. While community relations encompasses more than just budget issues, the budget is a tangible document that affects everyone in the district—parents, taxpayers, employees, and interested citizens. As a result, it can be a focal point for the district's message about its educational program and the need for personal and financial support. Without adequate attention, it can also become the focal point for dissatisfaction and public complaints about the district, its policies, and operations.

Campbell provides a useful set of instructions for public school personnel working to market their budget to the community.[6] These guidelines cover a range of activities designed to communicate effectively with district stakeholders.

Employ a customer focus

School districts are similar to companies in the service industry; they provide a service and rely on satisfying their customers for continued success. Districts have a wide range of customers: students, parents, residents of neighborhoods near schools, senior citizens, taxpayers, local businesses that employ their graduates, teachers, and administrators. Each group has its own reason for being interested in the schools. In marketing the budget, the district must pay close attention to all of these groups.

Audiences. The first requirement is to "know your audience."[7] That means identifying the different groups that make up the audiences for the district and its budget. Beyond just identifying these constituencies, a customer focus aims to understand what their interests are, what they expect from their schools, and what they will support in terms of programs and budgets. To achieve this objective, it is necessary to "find out what they think about your schools." This can be done through such means as direct contact, school and community meetings, and surveys. This allows the district to understand each group's information needs and

6. This section is based on Gay Campbell, "Drawing the Community into the School District Budget," *School Business Affairs*, vol. 61, no. 9 (September 1995), pp. 9-13.

7. Ibid. The comments in quotations in this section are some of the subheadings in the article.

"tailor the message to each audience." For example, parents are interested in programs for their children and how well they are succeeding, senior citizens may be concerned with increasing taxes, and the business community may want to know how district programs are preparing students with necessary employment skills. It is also suggested that "a budget message that starts out thanking the community for its support and crediting community support for successful programs for students will do a great deal to set a positive tone with the community and foster productive future relationships."[8]

Develop basic operational strategies

Long-term relationships. Marketing the budget is more than a once-a-year activity. It takes year-round effort to be successful in establishing and maintaining community trust and support. The key is building relationships with these groups through personal contacts, clear and honest disclosure of financial information, and regular attendance by school staff at community, neighborhood, and school activities.

Citizen task force. Another useful approach for both building community support and obtaining useful ideas is creating citizen task forces. In selecting members for these committees, the district should try to "identify key influentials," persons who are opinion shapers. These task forces are created to study particular problems facing the district and to recommend solutions. Financial topics for task force consideration could include achieving financial stability for the district, long-term facilities, equipment needs of the district, and school closures. At the conclusion of the task force's work, some members may be willing to serve as spokespersons for the district to promote acceptance of their recommendations. For budget elections, this can mean public endorsements and even speaking engagements by task force members. Respected individuals outside of the district hierarchy speaking positively for the budget can be more credible than "self-serving" insiders.

Before establishing citizen task forces, the district must be willing to put into practice at least some of the feasible recommendations that may result. Creating a committee to study a problem as a means of stalling for time in the hope that the problem will go away is shortsighted and breeds community distrust.

Integrity. Another important caution is "don't make promises you can't keep." This can destroy the credibility of the district and its administrators and undermine the entire community relations effort.

School staff. In the overall effort, remember to "keep staff informed." Every school employee is an ambassador to the community whether they know it or not. Consequently, employees need to understand and be able to discuss the important budget issues knowledgeably.

8. Ibid., p. 12.

Emphasize an educational message

The most effective message to use in marketing the budget is the educational purpose. The key is to "relate your budget information to district purpose/product." That is, highlight how the budget will fund the programs needed to achieve the district's educational goals for the community's children. Show how community support for the budget will allow the district to improve educational performance. Link expenditures to educational results—past, current, and future.

Image of good stewardship. An additional issue is "promoting the image of stewardship"—both in large and small ways. It is easier to get the support needed if the public believes the district's spending priorities emphasize student learning rather than activities far removed from the classroom. This is true even though some of these operational and administrative support services are essential to effective district functioning. In line with the image of fiscal prudence, the physical look of the budget document should reflect professional competence, but not extravagance.

Making the presentation effective

Paying attention to the interests and concerns of those on the receiving end of the budget presentation will give the material and its delivery much more impact. The following tips for creating and presenting an effective message to the public center around maintaining a customer focus throughout the marketing process.

- **Make It Interesting.** The average attention span is short. Make every word count. Use positive language with active verbs. Avoid repeated use of words with negative implications (e.g., taxes).
- **Keep It Simple.** Do not overwhelm the readers with technical detail. Use simple statistics and relate them to easily understandable concepts (e.g., cost per child for a particular program compared to the cost of a common consumer product).
- **Ask Instead of Telling.** Listen to the customers; solicit their opinions and advice in a variety of settings. Find out what is important to them and reflect their interests in the budget. This builds ownership of the district's programs among community groups and leads to support.
- **Show Instead of Tell.** Graphs communicate points much more effectively than tables of numbers.
- **Don't Gripe.** The public is turned off by hearing how hard school personnel are working, how much the staff needs new equipment or facilities, or what difficult problems schools face. Rather emphasize the positive results of student achievement, programs that are successful, cost saving improvements, and community partnerships.
- **Show You Care Through the Language You Use.** Avoid educational jargon and technical financial language. Write and speak at levels readily

understood by the audience, not too abstract, simplistic, or condescending.

- **Deliver It Their Way.** Use multiple means of delivering the budget message to the community. Not everyone receives their information about schools and the district budget in the same way. Use a variety of approaches to reach different audiences: newspaper articles, media publicity, speeches at civic clubs, newsletters from schools and district office, personal letters, brochures, neighborhood and school meetings, video presentations.

The basic purpose of a community relations effort is to communicate honestly with the school district's many audiences, to tell the district's story in an effective way. The goal is to develop community support for the district's programs by demonstrating how they serve the students and citizens of the community. The budget is a critical component of the district's operation and needs to be a part on the ongoing community relations activities.

Budget Elections

The bulk of local funds for education comes from the local property tax, a tax on real property located within school districts. To levy and collect property taxes, school districts require some type of formal public approval. Without this approval, school districts do not have the legitimacy or authority to collect and spend these public monies. State laws and regulations vary widely on the type of public approval required and the procedures for obtaining it. In some states the only requirement is that the school board approve the budget and set the tax rate or amount of local tax dollars to be raised. With school board approval, no further authorization is needed for the district to levy the necessary taxes and spend them as specified in their budget document.

Other states require some form of election for district patrons to approve the district's spending or taxation plan. However, there is wide variation among states on the form of the election: Some require voter approval of the district budget itself. Others require approval of the amount to be raised from local property taxes to support the budget. Still others mandate approval of a tax rate to be applied to all taxable property in the district. Whichever form the elections take, the voters have the last word on the amount of local funding for their district.

Due to the relatively small geographic size of most school districts and the manageable election logistics at the local level, school district budget elections offer citizens the opportunity to vote directly on public spending and taxation issues—and often, by implication, educational program issues as well—rather than indirectly through elected representatives. It is one of the few times citizens can vote directly on measures that affect their pocketbook. This fact alone can make school district fiscal elections difficult to win, particularly in uncertain economic times.

In a sense, a fiscal election to approve the budget or levy a tax is the ultimate political event for a school district. To be successful requires a clear understanding of the district's economic and social situation, careful election planning, a well designed and executed campaign strategy, and a commitment to communicating the district's educational needs to the public. While this topic does not apply to all school districts, fiscal elections can be the crucial factor in providing and operating adequate educational programs in the districts required to hold them.

For districts requiring budget elections, there are two points to keep in mind. First, budget development process activities should be aimed at developing a consensus within the community about the programs to be funded and the funding amounts. Persons or groups alienated during the preparation of the budget may become nonsupporters or even active opponents at election time. Second, the final budget should be acceptable to a majority of voters in the school district. It is probably not possible to please everyone, but there should be something in the budget to appeal to more than half of the expected voters in order to win the election.

Budget Election Process

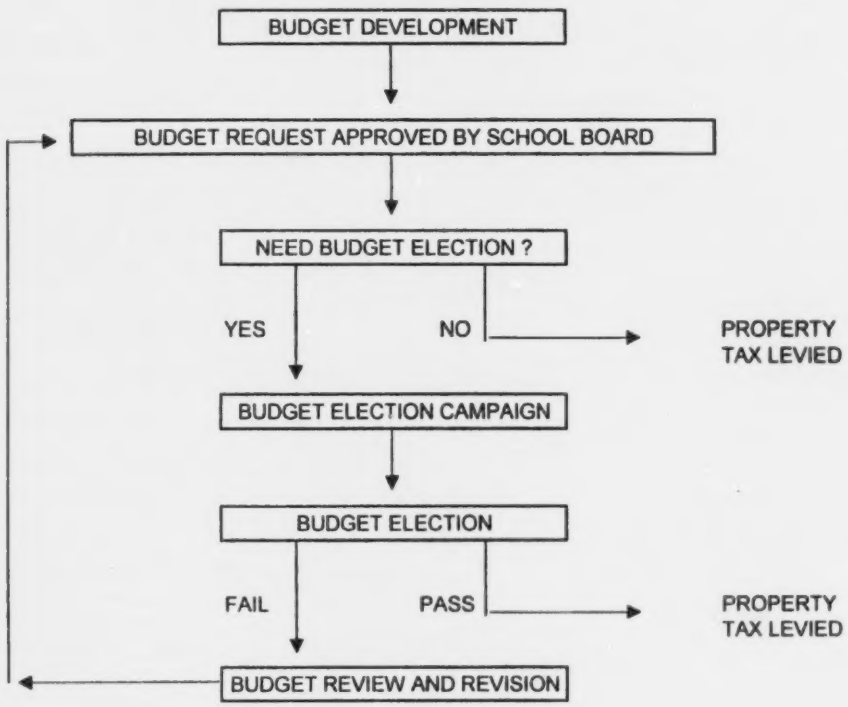
The fiscal election held by a school district is the culmination of the budget approval process. Figure 6.5 illustrates six steps in the budget election process. In many ways, these activities are identical to or run parallel with the district's community relations program. In fact, the budget election can be considered a special case of community relations, and many of the same considerations apply.

Budget Development

Decisions about the overall level of funding and particular program emphases are guided by school board directives and instructions. However, a great deal of information, suggestions, and advocacy are provided by numerous other individuals and groups interested in shaping the final budget toward their programs or values. Such actions come both from inside the school district organization and from community groups. For example, a high school science teacher may be requesting new laboratory equipment; a middle school principal may seek a greater share of the money allocated for supplies and equipment in the district; or a business manager may ask for several new microcomputers to improve the efficiency of the fiscal office. From the community, parents of a particular elementary school may insist on new playground equipment, business groups may suggest greater emphasis on vocational skills for graduating students, or an advocacy organization for the handicapped may demand improved access to school buildings and classrooms. It is helpful to remember while still in the development phase that support from all of these groups will be needed in the later phases to pass a budget election.

FIGURE 6.5

School District Budget Election Process



Process continues until election passes or budget request is lowered to a point where an election is not needed.

School Board Approval

Once the budget has been developed, school board members must evaluate the school district's budget request. During the board's deliberation, they may allow public testimony on the budget at regular or special board meetings. Special interest groups again have an opportunity to make their case for funding their particular programs or activities. In addition to educational advocates, the board may also hear the views of groups and individuals concerned with the high cost of education who would advocate cutting the budget to lower their property taxes.

If the board feels that the budget as presented is appropriate they may approve it without much question or controversy. Otherwise, they may ask for additional information or justification and may require some reallocations or reductions in the proposed budget before giving it their approval. Occasionally, they may request increases in certain budget areas to initiate or augment popular programs. Once the school board is satisfied with the budget request, they approve

TABLE 6.1
Amount of Budget Election

Total District Budget		$20,000,000
Less:	State Aid	$11,000,000
	Federal Funds	$1,000,000
	Local Funds	
	Nonproperty Tax Revenues	$500,000
	Property Tax Revenues Not Requiring Voter Approval	$3,500,000
	Total All Other Revenues	$16,000,000
Equals:	Tax Levy Amount for Budget Election	$4,000,000

it with appropriate modifications.

The Need for an Election

The next step is to determine whether or not a budget election is required. As Table 6.1 illustrates, if the school district will not have sufficient revenues from state, federal, and other locally raised funds—including property taxes which can be levied without an election—then it will be necessary to hold a fiscal election to obtain voter approval to levy additional property taxes to balance its budget.

An alternative to an election would be reducing the budget request (expenditures) to the level covered by available revenues. Some districts and their boards may choose this option if the amount of additional revenue requested is small and the budget cuts relatively minor. Other districts may not have this option if they are dependent on annual elections to approve property tax revenues that comprise a substantial portion of their total revenues.

In reality, the district administrators and school board will have determined the necessity of a budget election prior to board approval. In addition to the size of the overall district budget and the programs that it represents, the amount of the election, if needed, will have been one of the key considerations of the board during the approval phase.

The school board is a political body and the members generally attempt to represent the views of the majority of their supporters. The district's historical support of education, its voting record on budget elections, and the economic situation of the district and its patrons all contribute to the board's decision to approve the budget at a given level and the necessity of holding a budget election.

Election Campaign

If an election is to be held, the school district will need to conduct a campaign to convince the voters to support the tax levy request. This campaign is a political effort aimed at winning the election and consists of a series of activities aimed at obtaining passage of the budget election.

The district, however, is constrained in what activities it can undertake during the campaign. School districts are public, tax-supported institutions and their employees are paid from public funds; consequently, it is generally inappropriate—and, in most states, illegal—to use district funds or district employees during working hours in the budget election campaign. Nevertheless, it is generally proper for the district to furnish the public with factual information concerning the tax levy to be voted on and for district employees to work in the campaign on their own time.

In spite of these limitations, there are a variety of effective campaign strategies available to school districts. The particular campaign strategy chosen will vary with the school district's situation. Even within a district, circumstances can vary widely from election to election even during the same year. It is important to choose an appropriate combination of activities for specific district situations and characteristics of the likely voters.

Budget Election

The culmination of the election campaign is the election itself. If the district is successful in obtaining a majority of "Yes" votes, then the district has secured public approval to levy the needed property taxes to support its operations during the upcoming year. However, if the budget election fails, the district does not have the authority to levy the needed taxes and must begin again with the approval process.

Budget Review and Revision

What happens following a budget election defeat depends on the governing statutes of the state and the decisions of the school board. In some instances, state law specifies a particular process. This might be to revert to last year's budget, tax levy or tax rate, or to use a mandatory percentage reduction in the levy request. In others, the local school board has some discretion. Their choices can include resubmitting the identical budget levy to the voters for another election attempt, reducing the budget levy and resubmitting a lower amount to an election, or accepting the voters' decision and operating the district within the available funds. This latter choice is only feasible when the district has sufficient funds to provide at least a minimally acceptable educational program for the school year.

To reach an appropriate decision, the district administrators and the school board members need to review the district's budget, educational programs, and the

election results. A narrow defeat could indicate that passage would be possible in another election if a more effective campaign were conducted. On the other hand, a large margin of defeat could be interpreted as a clear message from the voters that the budget and levy amount must be reduced before they will support them.

If the election amount is to be reduced, then, unless additional revenues are found from state or federal sources, the total budget must be reduced and programs cut. If budget cuts are necessary, the usual procedure is for the district administrators—with input from district personnel, bargaining unit representatives, parents, and community members—to propose programs or parts of programs to be reduced and to develop a revised budget to present for school board approval. See Chapter 5 for a discussion of budget reductions. The school board members must then review the revised budget and the proposed cuts, make any modifications that they think appropriate, and approve the revised budget. From here the process iterates until either a budget election passes or sufficient budget reductions are made so that an election is not necessary.

Campaign Strategy[9]

The primary responsibility for directing a budget election campaign and the related activities is with the district office. If the district is large enough to support an office and staff for community relations (also called public relations or public information), then most likely the management of the budget election campaign will be one of their responsibilities. In smaller districts, the superintendent must either take on these responsibilities personally or delegate them to other staff members. In any event, the campaign management is a district office responsibility even though many other persons may be involved in various campaign activities.

Research and Analysis

A successful budget election begins with collection and analysis of information to guide the the campaign. These research activities can give the district administrators vital information in planning and implementing an appropriate strategy. The results provide insight into past voter behavior and the current attitudes and feelings of the community. They also can pinpoint the messages the district needs to communicate to the community in order to pass the election, as well as the best means of delivering these messages.

Election data. An analysis of data from past elections and information about the present distribution of registered voters is a valuable starting point for budget election campaigns. Such data are available from the county elections office or other agency that conducts the budget elections. The number of registered

9. This section is based on materials provided by Gay Campbell describing two district fiscal election campaigns in Eugene, OR which were awarded Gold Medallions from the National School Public Relations Association for outstanding achievement.

voters and the level of voter turnout by precinct (percentage of eligible voters who voted) provides basic information on the size of the expected electorate. Further breakdowns of the percentage "Yes" and "No" votes by precinct over the past several elections can provide an indication of voting patterns in the district. Grouping the precincts by school attendance area within the district can also help interpret voting patterns as well as establish a baseline to measure the results of school-based campaign activities.

The key precincts are those with the highest possible payoff to the district in terms of winning the election. First, large precincts have more votes than do smaller ones. Second, the number of voters who cast ballots in a precinct is even more important than the number of registered voters. Third, the percentage "Yes" votes combined with the turnout are the critical measures of the precinct's importance in winning the election. For example, it is better to get a 60 percent "Yes" vote in a precinct with a turnout of 1,000 voters (600 "Yes" - 400 "No" = 200 "Yes" vote margin) than to get a 100 percent "Yes" vote in a precinct that turned out only 100 voters. Fourth, efforts should be concentrated on the activities most likely to maintain and increase the number of "Yes" votes. It may be a waste of time, energy, and money to concentrate too many campaign resources on voters who already are going to vote "Yes" or who will never vote "Yes."

Demographic data. Data characterizing the district's residents can also provide helpful information for the election campaign. Demographic data concerning the age, education levels, income levels, number of children of school age, family size, housing, and other characteristics can be compiled from Census data and broken down by individual school boundaries or precincts. Combined with the election information, these data can be organized to develop profiles of district and precinct voters, which can aid in selecting an overall campaign strategy and specific election activities.

Economic data. The economic condition of the district is also a critical variable in the campaign strategy. Available economic data, such as employment or unemployment figures, personal income, real estate information (new housing building permits, house sales, housing and apartment vacancies), and business activity (new starts, expansions, bankruptcies, closings), county or region unemployment statistics can provide indicators of the strength of the local economy. The chances of voters approving a budget election that will raise property taxes are greater in good economic times than in difficult ones. Consequently, the message the district needs to communicate to voters to convince them of the need to pass the election may differ from periods of robust economic activity to weaker periods.

Community surveys. Another common approach to gathering information on community attitudes and concerns about the school district and its fiscal situation is by survey. Districts use surveys to assess the voters' opinions on important issues. Examples include voters' understanding of the financial situation facing

the district; whether they believe that the district actually needs the money; whether they would support a tax levy and what amount; whether their support is tied to using the money to accomplish certain things in the district and what those things might be; whether the fiscal management and spending patterns of the district is seen as prudent and appropriate or excessive and wasteful; and their perceptions of the most critical problems facing the district's schools.

If the survey also contains a section for personal and demographic information about the respondent, it may be possible to develop profiles of various types of voters to help target campaign efforts effectively. Such information could include age range, income range, type of employment, children in school, and location in district or perhaps zip code.

The answers to the issues and demographic questions can be extremely helpful in developing a campaign strategy and message to communicate to the voters. However, surveys cost money whether the work is done by staff or an outside consultant, and the results must be worth the price. Before conducting or commissioning a survey, the school district must know why the information is wanted and how it will be used to improve the chances of winning the budget election.

There are many different types of surveys school districts can use in their communities: mail questionnaires, telephone surveys, and personal interviews. In selecting a survey method the district must balance the content of the survey questions, the desired sample size, the detail of the answers required or desired, the time available for the survey, the personnel available to conduct the survey, and the survey cost.

Planning the Campaign

A successful election campaign requires careful planning of activities and coordination of the many individuals and groups working in the campaign. Planning begins months before the actual election and is necessary to identify the specific activities to be undertaken, to mobilize the necessary resources (people and money), and to direct the campaign.

Campaign leadership. Election campaigns need an individual or small group of individuals to serve as the core leadership body to determine campaign strategy, raise and allocate resources, and direct the activities of others involved in the campaign. Generally, one or more school district administrators is assigned primary responsibility for these tasks. However, state laws frequently prohibit school employees from working for the passage of budget elections or use of district resources in an advocacy role. Providing unbiased information about the budget election is generally permissible, but it must be done in a manner that neither supports nor urges passage of the tax levy. Consequently, any advocacy work must be done either by school district employees after work hours or on their

own time (vacation days, lunch hours) or by private citizens not employed by the school district.

Yes Committee. To assist in the campaign and to work actively for the passage of the budget election, a private, nonprofit group, "Vote Yes for Schools" committee—or some similarly named group—may be formed. Typically, officers and members are well-known citizens in the community whose public endorsements will lend validity and prestige to the election campaign. Such a committee is a valuable tool to counter organized opposition to the budget election, to develop public support of education, and to refute any controversy over the size of the budget or tax levy proposed by the district.

The Yes Committee serves as a partner to the school district in the election campaign, doing things that the district is prohibited from doing—encouraging the public to vote for the budget election. School district employees who are members must not participate in any Yes Committee activities during working hours because the committee is an advocacy organization established to campaign actively for passage of the budget election.

Timeline for election activities. In an election campaign, timing is critical. The objective is to orchestrate a crescendo of positive activities just prior to the election date to sweep the voters along with a real or perceived wave of support for the budget election. Reaching a peak too early allows the opposition time to gain strength and counter the district's and Yes Committee's activities with activities of its own. Reaching a peak too late means the election is over before adequate public support can be built.

A useful device for planning and organizing the budget election activities is a timeline or schedule of all important events. Similar to the budget calendar, the timeline lists in chronological order all of the activities that need to be accomplished during the budget election campaign. An election campaign is generally a frantic undertaking, and it becomes increasingly chaotic as the election date approaches. A well thought-out timeline can aid in keeping track of critical activities in the heat of the campaign. An example of a combined school district and Yes Committee timeline for a mid-May budget election is shown in Table 6.2.

Target audiences. There are many groups of potential voters in the district, and they often have different concerns about the district's educational program. Besides trying to reach the general public with an overall message about the need for support of the budget election, it is often effective to target selected messages for each important group in the district.

For each target audience selected, the district must identify the message to be emphasized. Examples of groups that may rate special attention and the possible message to communicate are shown below.

- **District teachers**—emphasis on teaching positions and educational programs that would be maintained or restored if the budget is approved, or

TABLE 6.2

Timeline for Budget Election

Activities of School District Personnel	Date	Activities of Yes Committee
	January 9	Hold organizational meeting for Yes Committee
	23	Contact community leaders to support & join Contact employee & student groups for support
	26	Plan budget & funding sources.
	28	Locate office space and furniture
Set election date. (May 15)	February 7	Contact ad agency to develop campaign
Launch voter registration drive at schools	23	Outline major tasks and timeline. Contact parent advisory committee at each school
	26	Begin work on brochure design & content
	March 5	Identify key workers for each region
Arrange interviews on TV & radio Locate speakers.	8	
Complete administrators' budget election handbook Complete speakers' materials.	12	
Presentation to district administrators Letter to district employees describing election	13	
Complete media materials.	15	Firm up dates for speakers at parents' meetings
Hold media brietings and provide material	19	Solicit contributions from individuals, business, community, district employees.
Board determines levy amount.	April 4	
Follow-up meeting with district administrators	12	
Complete voter analysis.	15	
Establish "hotline" for budget or election information Op-ed article by school board member in newspaper	16	Draft of brochure completed.
Send voting reminder material to schools	23	Print brochure.
Mail informational material to public Send fact sheets to parents from schools	May 7	
Promote school activities and open houses	13	Distribute advocacy material. Canvas neighborhoods with regional workers Run newspaper ad supporting budget election
ELECTION DAY	May 15	ELECTION DAY

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on the reverse, positions cut and programs eliminated if the budget election fails.

- **Classified employees**—emphasis on jobs that would be maintained or restored and job security with passage of budget.
- **Parents with children in school**—emphasis on classroom size and program restoration that would be possible with approved budget election, or on the reverse, program cuts, increases in class size, loss of educational opportunities for their children if the budget election fails.
- **Patrons with no school-age children** (e.g., senior citizens, college students, young married couples)—emphasis on benefits to the community of a quality educational system such as increased property values
- **Business community/chamber of commerce**—emphasis on sound business practices of the school district, recent money saving efficiencies in the district, the need for properly educated graduates entering the work force, and the importance of good schools in economic development.

Communication Techniques

Once the planning phase is complete, work begins on implementing the strategy. This effort consists of communicating specified messages about the budget election to the general public and target audiences.

Voter registration. An early and ongoing step to increase the number of likely "Yes" votes is to conduct voter registration drives among groups believed to support education. This effort is promoted and encouraged by the district office, but most of the actual registration can be done at the school level.

The most obvious support group is parents of school age children, particularly elementary grades. Each school principal should encourage parents to register to vote. New community residents or those who have changed address and are registering their children in a new school should be provided with a voter registration form as a part of the school registration process.

A more systematic voter registration effort can be undertaken, perhaps by a parent advisory council if they are active in each school. Voter registration lists can be compared with the names of the parents of students in the school. Those parents not registered to vote can be contacted and encouraged to register.

School-based activities. Principals play an important role in this effort and have the responsibility of leading their school's activities. Three things are necessary for effective school-based election activities:

1) Procedures for encouraging the principals to participate actively in the campaign and to give campaign activities a high priority in their administration of the school;
2) Assistance to principals in formulating effective activities and developing appropriate materials;

3) Coordination between the district office's overall campaign strategy and school-based activities to avoid overlap, contradictions, and illegalities.

School-level activities can be mandated by a directive from the district superintendent, but the most dedicated and innovative efforts come, not by fiat, but through school building personnel being positively involved in the campaign with a feeling of ownership of their activities and results. This can be accomplished by the district office establishing expectations and guidelines for the process of the school-level activities in the campaign and then providing encouragement and assistance to school building administrators in reaching those goals.

The school-level activities generally consist of trying to increase registration of likely "Yes" voters, of informing local patrons about the budget election and its likely results on the school's programs and students, of creating direct contact between the school and its neighbors to increase their knowledge about their local school, and of working to involve all building staff in the activities in a productive fashion. An example of an actual checklist of school level campaign activities prepared for building principals by the district community relations office is given in Table 6.3.

Speakers bureau. An effective means of providing widespread, personal coverage of the issues and concerns in a budget election is through a speakers bureau. This is a list of individuals—school district personnel and private citizens—who are available to speak to community groups about the school budget election. Speakers need to be briefed about their roles, the issues in the election, questions that are likely to be asked, and proper responses to them. Speakers should also be provided with written materials giving factual information about the district's financial situation, the amount of the budget and tax levy, how the money will be used in the district, and the consequences of not passing the levy. Each speaking engagement should use two members of the speakers bureau: a school district employee to give factual information about the district's financial condition and uses of the tax levy being requested in the election, and a member of the Yes Committee to ask for support of the budget election.

A list of potential groups for speaking engagements can be compiled from the service clubs, civic clubs, professional and business associations, neighborhood groups, and other similar organizations in the district. These groups should be contacted well in advance to arrange speaking engagements shortly before the budget election.

Campaign materials. A successful election campaign requires the development of a variety of informational materials. Materials prepared by the school district must be unbiased, present factual information, and not advocate passage of the budget election. Materials produced and financed by the Yes Committee may promote the budget election and urge its approval.

If target audiences have been established in the research and planning phases of the campaign, it may be appropriate to create special materials with

TABLE 6.3

Principal's Checklist for Budget Election

___ Get parents registered to vote. Voter registration blanks are available from the County Elections Office or the school district office.

- ____ New residents.
- ____ Families who have moved to your school from another school in the district must re-register if their address has changed.

___ Plan to involve as many parents as possible in registering voters and getting people out to vote. The Yes committee will contact your advisory committee to ask for volunteers to work on campaign projects.

___ Review "profile" of people living in school area (census and election data) provided by district office to help plan for disseminating information about election.

___ Send a letter to parents one week before the election date. A sample letter is included is included with this checklist, but you may want to develop your own. Tell them about all the good programs you had this year and some of your plans for next year. Inform them of cuts made over the last several years and how those have affected your building. Include items such as staffing ratios of both classified and certified personnel, supplies, and so on, and tell them how the proposed budget would restore some of the cuts.

- ____ Send a draft of the letter to the district office to be checked for nonadvocacy. It can be sent to parents as soon as the approved copy is returned to you.

___ Plan an open house or other event for parents between now and election day. Some other event ideas are:

- ____ Swap day (for high schools) where parents take their children's' places in school for one day
- ____ An Education Celebration to let people know all the outstanding things that have been done in your school this year
- ____ Open house
- ____ Community Day with activities for people
- ____ Grandparents Day, inviting seniors from the neighborhood
- ____ A coffee for school neighbors in the school or in neighborhood homes. Invite people who are unfamiliar with schools.

___ The district has developed a special brochure for parents. The brochure could be included in your next newsletter, sent home with students, or passed out at events.

___ If you have volunteers other than parents, plan a coffee or event (possibly a "volunteer recognition") and discuss the election.

___ Visit senior citizen groups, community groups, and other organizations in your area to tell them about the budget election and what it means for your school.

___ If you belong to a service club or other community group, urge members to have a speaker on the budget election or offer to speak yourself. Because you are known and trusted by friends in that group, your participation in the discussion will be important.

___ Plan a staff meeting before election day to present the facts about the budget.

___ The district office has prepared fact sheets and transparencies for your use if you want them.

___ Encourage staff members to participate in the canvassing campaign to distribute literature in selected precincts on the Saturday before the election. It will take about two hours.

___ On election day, remind each of your staff members to vote.

messages aimed at each audience. The targeted messages should be accurate and fair, but feature different information and emphases depending on the concerns and interests of that specific audience. There are many forms targeted messages can take, and many ways to get them out: a letter from the superintendent to all parents; articles in newsletters from each school; handouts at school events near the election date.

Employee groups are also important in any election campaign. A positive supportive attitude should be strongly encouraged from all employees; their jobs and those of their colleagues may depend on the election outcome. Preparation of school-specific information illustrating the results of winning or losing the election is often an effective means of reinforcing this message. Examples of other materials for district employees include "Remember to Vote" posters for staff bulletin boards and "Ask Me" badges for district employees to wear.

The Yes Committee can contact district employees to encourage them to support the budget election and to vote "Yes" on election day. The Yes Committee can also solicit assistance from district employees to help in the campaign. As private citizens, district employees may contribute money to help finance the election campaign, and, on their own time, they can volunteer to work in the campaign. Activities that require a number of people, such as preparing mailings in the evenings or canvassing neighborhoods on weekends to solicit support, are excellent opportunities for district personnel to assist the election campaign.

Other types of targeted materials to consider include a special booklet for chamber of commerce members with detailed financial data, a separate mailing in traditionally high "Yes" percentage voting precincts to voters who have no school-age children, and a general mailing to all district patrons emphasizing the importance to the community of a high-quality system of public education. Each of these will be different and tailored to its intended audience.

News media. The news media present a special case for attention during the campaign. For many people much of their knowledge of the district and its educational programs comes through newspapers, television, and radio. Regular, routine reporting and news stories by the media are an ongoing part of a school district's community relations effort. These activities are frequently stepped up as a budget election approaches because of the importance of the event.

Throughout the campaign the news media personnel need to be provided sufficient factual information to enable them to report accurately the financial situation of the district and the circumstances of the budget election. If the district is seeking editorial endorsements for the budget election, additional information about the importance of passing the levy, the financial requirements of the school district, and the likely programmatic results and effects on students should be prepared and presented to the editorial staffs of the local media.

An organized "Letters to the Editor" effort in which citizens and represen-

tatives of organizations supporting the budget election submit letters of endorsement can create the appearance of widespread community support. Talk shows on local television and radio stations offer excellent opportunities for presenting both the district's factual information and the Yes Committee's advocacy position.

If funds are available, consider purchasing some media advertising to promote passage of the budget election. Newspaper advertising reaches a broad segment of the community and, consequently, most likely should present a message of general support and the need for quality schools. Radio and television spots, on the other hand, can be targeted to specific groups.

Election eve activities. Last minute activities are generally of three types: the final advertising, speaking, and information blitz; countering opposition efforts; and getting out the likely "Yes" voters on election day. The final push by the district and Yes Committee will be continuations of many of the ongoing activities during the campaign. Some, such as advertising, may be intensified during the last weeks. If a visible and active opposition has developed, it may be necessary to refute its claims and answer any questions that they may have raised. This could entail revising the district's messages and even preparing new materials to diffuse opposition activities.

"Get-out-the-vote" activities are concentrated during the last few days of the campaign, but the district and Yes Committee must have planned them well in advance to ensure that they can be accomplished on time. These include such activities as telephone and door-to-door canvassing in targeted neighborhoods shortly before the election date to make people aware of the issue and to remind them to vote. For election day itself, other activities could include offering transportation to polling places for those who need it and calling registered voters in historically pro-education precincts who have not voted by late afternoon to remind them to vote.

Evaluation

Election analysis. The work is not over after election day. A precinct by precinct analysis of the results should be made. While it may be tempting to skip this step, it creates valuable information for the next budget election and does so at a time when the events are fresh in everyone's mind. Possible types of analyses include:

- Precinct comparisons of the turnout, number, and percent of "Yes" and "No" votes on the budget election with past elections and with any other issues on the same ballot.
- Identifying locations where there were changes in past budget election patterns.
- Comparing precinct results with locations of specific campaign activities. The expected result is that the precincts with the largest percentage "Yes" votes and the greatest percentage improvement in "Yes" votes correspond

to areas where the most work was done by individual schools and campaign workers.

- Investigating anomalies to this pattern to understand their causes.

Feedback. Provide feedback to those who worked in the campaign. If the principal or parents at certain schools made a difference in the election results in their area, they should be told—either way. Principals who were active and directed a thorough and effective local campaign should be congratulated and their accomplishments lauded publicly. On the other hand, the shortcomings of principals who put forth a minimal effort can be exposed by comparing the voting results of their precincts with successful precincts.

Those working in the campaign obtain much information and experience. This knowledge should not go to waste. Post-election evaluation sessions should be held with campaign workers to discuss the effectiveness of the campaign organization, the fund-raising effort, the specification of appropriate target audiences and the messages for each, the advertising, the campaign literature, the direct mailing strategies, the speakers and the selection of audiences, and canvassing and telephone efforts. The recent campaign will not be the last one the district has to conduct and the knowledge gained on this budget election campaign can be put to use in future elections.

Conclusions

If a school district needs to hold an election to obtain sufficient funds to balance its proposed budget and operate its programs for the upcoming year, it is critical that a maximum effort be devoted to winning the election. This effort culminates in the actual election, but it requires an ongoing community relations program between the district and its patrons. Voters who know about the school system, who have been told of its successes, who have had the opportunity to participate in deciding its direction, and who share its goals for improvement will be most likely to vote to support schools at an election. Regular communication from the district office to parents and other members of the community is important, but communication from the individual schools is a critical component of achieving an informed and supportive public.

The budget election campaign can be very time consuming, but it deserves top priority from school administrators. The district superintendent and other senior district administrators must take responsibility for planning and executing a winning campaign. This involves research and analysis to understand the district's past voting patterns and types of voters, planning of an appropriate campaign strategy including the use of a Yes Committee if needed, and implementing various campaign activities to inform and convince the public to support the budget election.

Problems

6.1 Design a budget presentation to your school board. Identify the type and level of detail of the information to be presented, information format, and presentation methods you would use. Prepare sample illustrations of your presentation materials.

6.2 Collect and organize election, demographic, and economic data relevant to a budget election in your district. Prepare a report highlighting your findings; use appendices, if necessary, to present extensive tabular data.

6.3 Prepare a campaign activity timeline for an April budget election in your district. Identity the major activities that need to take place, their sequence, and the appropriate dates for each.

6.4 Identify the important target groups for a budget election campaign in your district. Specify the most appropriate message(s) for each group and the means you would choose for communicating those messages.

6.5 Outline the activities for an effective speakers bureau for a budget election campaign in your district. Identify appropriate speakers from within the school district and from the community (positions, not individuals' names). Specify the groups, organizations, and situations to which you would plan to send a speaker and which speaker(s) from your bureau would be sent.

Notes

7 Budget Management

Introduction

During budget preparation, the document itself serves as the vehicle for planning and resource allocation decisions in the district. After the budget is adopted by the school board and the appropriations made to the various accounts, it then becomes a tool for managing and controlling expenditures and monitoring revenues. Budget management concerns both expenditures and revenues. For expenditures, it is the process of regulating expenditures during the budget year to assure that they do not exceed authorized amounts and that they are for the proper purposes. For revenues, budget management involves overseeing revenues to assure that receipts reach anticipated levels or that corrective action is taken.

The appropriated amounts established by the school board set the limits on what the district can spend in each budget area. These areas are usually fairly broad—typically the first function level, such as Instruction or Support Services, in each fund in the district budget. At this level, the appropriation amounts provide only general guidance to manage district spending during the school year. This is entirely appropriate; it is the role of the school board to establish general fiscal policy for the district, and the role of the district administrators to implement that policy. It is generally not appropriate for school board members to involve themselves on an ongoing basis with the details of individual expenditures unless they suspect some problem.

Expenditure Data

Detailed budget data are used for administrative purposes to control district expenditures. These are the expenditure projections prepared by each school and district-level department during the budget development process and aggregated into the summary budget document for the district. Within each accounting fund, the original budget data were established at lower, more specific levels in the school accounting system. For example, a typical budget in the instructional area can be developed by *function* (Instruction), *program* (Regular Instruction), and *level of instruction* (elementary, middle, or high school). Support Services budgets are generally prepared by *third-level function* accounts (e.g., educational media services, office of the principal, fiscal services, operation and maintenance of plant). Within each function specific expenditures are shown *by second-level object* accounts (e.g., regular salaries, type of benefits, type of purchased services, type of supplies). In some

districts the budget data are shown at even lower levels of detail to provide additional information. For example, regular salaries can be separated into those for regular employees or for temporary personnel.

Another budget classification dimension frequently used by school districts in conjunction with function and object specifications is *operational unit* or *cost center*. Every segment of the district's operation can be assigned to a specific cost center that has an administrator in charge. For example, each school building in the district could be a separate cost center with the building principal responsible for managing expenditures. Similarly, district-level departments in the central office can be created and managed as cost centers. Each cost center would have an individual accounting code number assigned to it. During the operating year this number, along with the function and object of the expenditure, would be recorded for all expenditures incurred by the cost center. For example, the purchase of textbooks for a high school mathematics course would not only be recorded as an instructional expenditure for the regular high school program—and even for the mathematics area if the district maintained its function codes at this levels—and as a textbook object of expenditure, but also would be identified by the particular high school in the district that made the purchase. In this way, the financial accounting system would then be able to collect, maintain, and report all expenditures by each individual school and district-level department separately.

By summing all of the expenditures for the same function and object account codes for each cost center it is possible to maintain a running total of the amount and types of expenditures to date in each area. The expenditure data should be updated regularly, and reports presenting this information should be prepared and distributed to the district administrators. If the reports are available on a timely basis, all cost center administrators will have a report that can be used to monitor the expenditures of their operation.

Budget versus Actual Expenditure Comparisons

The first comparison to make is between the actual expenditures and those budgeted. This comparison can answer two questions that are significant to principals and department administrators concerned with cost control.

1. Are the actual expenditures for the particular area within the budgeted amount?
2. How much is left to spend?

If the budgeted expenditure amount is included in the report, the comparison is readily available. Table 7.1 illustrates the simple comparison. In this case, this account had a budget of $1,000,000 and the year-to-date (YTD) expenditures totaled $800,000. The account is not overspent and has $200,000 or 20 percent of the original budget still available for further expenditures.

TABLE 7.1

Budget versus Actual Expenditure Comparison

BUDGETED APPROPRIATION	YEAR-TO-DATE EXPENDITURES	BALANCE REMAINING	PERCENT REMAINING
$1,000,000	$800,000	$200,000	20%

As a manager, how can you judge whether or not the situation illustrated in Table 7.1 is under proper control or in need of rapid attention to stay within budget? More information is needed to make this judgment. First, it is important to know the type of budget account; second, the date of the report is also critical. If the account is for expenditures generally expected to occur regularly and more or less equally throughout the year and it is early in the school year, then this report would indicate a problem. For example, if 80 percent of the money is gone in November, this account is in trouble. However, if the report is in May, with 20 percent of the money unspent, there may be funds left over at the end of the year.

Accounts with irregularly timed expenditures require knowledge of the spending patterns to evaluate the budgetary status. If the expenditures are in an area, such as instructional supplies, where items are purchased early and used throughout the year, then spending 80 percent of the money by September may be an appropriate action.

Another piece of information often provided in cost reports is the monthly expenditure amount. This is the amount spent in the last accounting period. The year-to-date amount is the total of all of the monthly amounts up to that time. It is a good idea to review the monthly amounts reported for each account under your cost center to ensure they are correct on two counts: On a managerial level, inspect the report to confirm that the proper level or pattern of spending is happening and that no unauthorized purchases have been made. On a mechanical level, check to see that there are no recording or reporting errors in the report, such as expenditures from other cost centers charged to your accounts or incorrect amounts charged for purchases. If the monthly expenditures are verified each month, the year-to-date figures will be reliable also.

Encumbrances

Reliance on the budget versus actual comparison of expenditures may not be sufficient to provide adequate cost control and to prevent overspending. Not all of the balance remaining may actually be available to spend. Some of the remaining

funds may be committed to expenditures that have not yet been made. The accounting system does not record expenditures until the time that they are incurred; only actual amounts are entered into the expenditure accounts—not planned or anticipated ones. If the district has made a commitment for a future expenditure, but has not actually made the expenditure yet, then that expenditure will not appear in either the monthly or year-to-date totals.

Without information on the money committed but not yet spent in addition to the actual expenditures to date, it would be possible for an administrator unknowingly to spend or approve an expenditure that would exceed the budget limit. For example in Table 7.1, if purchase orders have been issued for $150,000 for items not yet delivered, then only $50,000 is really available in the account. However, this information does not appear in this simple budget versus actual comparison to inform or warn the administrator. By looking at the balance remaining, an administrator could approve another $100,000 of expenditures in the account with every expectation that they are appropriate and within the budget. Instead, the administrator would have caused the account to go over budget by $50,000.

This example makes it clear that another component is needed in financial control and reporting to prevent inadvertent overexpenditures due to lack of information about future commitments. Future obligations against the budget amount need to be recorded and reported along with the actual expenditures. Administrators will then be informed of the real balance remaining that they can spend.

This is done through a method known as *encumbrances*. These are a separate set of accounting records that are used to record financial commitments made by the district before they are final and recorded as expenditures. Encumbrances are defined as:

> *. . . obligations in the form of purchase orders, contracts, or salary commitments chargeable to an appropriation and for which part of the appropriation is reserved.*[1]

Encumbrances are different from expenditures. The obligations recorded in the encumbrance accounts are estimated at the time the obligation is made and are subject to change when finally settled. By contrast, expenditure accounts, by definition, are reserved for recording only the *actual* amounts of transactions; estimates are not permitted in these accounts. Consequently, expenditures can only be recorded in the accounting system when the amounts are known with certainty only after the transaction is completed. The reason is that the actual amounts may

1. William J. Fowler, *Financial Accounting for Local and State School Systems 1990* (Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, 1990), p. 118.

be different from the originally estimated or anticipated amounts.

This is the case for many district commitments made for the future, even legally contracted obligations. For example, salary contract amounts are commitments by the district to pay employees agreed upon salaries. These amounts are established in the contracts and are obligations of the district. However, they are not actual expenditures until salaries are paid each month. Resignations, leaves, or other situations will come up during the year that will prevent some of the contracts from being fulfilled as originally written.

Another common example of differences between original commitments and actual expenditures occurs with purchase orders. When a purchase order is issued, it is an obligation on the district to pay for the specified items. However, sometimes the price of the items is not known precisely at the time of issue, or prices may change between the time the purchase order was prepared and when the goods were delivered, or different items were substituted for unavailable items in the purchase order, or freight will be added to the price of the item purchased. Use of the encumbrance accounts in these situations prevents the expenditure account from incorrectly recording estimates rather than actual amounts, but also provides information to administrators to prevent over-budget expenditures.

Encumbrance Accounting

When the district incurs an obligation for payment later in the year and wishes to track its uncommitted and available remaining funds in that account, it may use the encumbrance accounting system. As noted above, encumbrance accounts are separate from expenditure accounts, but they are used in combination to record related financial information about district transactions.

The procedure begins when the district makes a financial commitment against a budget appropriation, but will not pay for the commitment until sometime later. The first step is to enter the estimated amount in an encumbrance account associated with the appropriation. This reduces the uncommitted funds still available in the appropriation and, in effect, reserves this part of the appropriation to pay off the commitment. When the commitment is paid, the actual amount is recorded as an expenditure against the appropriation and the associated encumbrance is canceled. The payment satisfies the obligation, and the recorded expenditure for the actual amount now reduces the appropriation. The encumbrance amount is canceled since it is no longer needed to earmark those funds to pay for the obligation.

To accomplish the recording and reporting necessary to include encumbrance accounts requires an extended format. An example of a summary encumbrance and expenditure report format for a cost center is shown in Table 7.2. This simplified format illustrates the encumbrance concepts. Actual report formats will show financial information by specific account within the cost center and will

TABLE 7.2

Encumbrance Reporting Format

ITEM	APPROPRIATION	SINGLE ENCUMBRANCE	SINGLE EXPENDITURE	YTD ENCUMBRANCE	YTD EXPENDITURE	UNENCUMBERED BALANCE
				minus	*minus*	*equals*
	APPROPRIATION			YTD ENCUMBRANCE	YTD EXPENDITURE	UNENCUMBERED BALANCE

aggregate transactions with the same account numbers, but the general design will be similar.

Each item or transaction in the report is given a separate line to illustrate its activity and status. The total appropriation for the cost center's accounts is shown next. This is followed by columns to record individual encumbrance and expenditure amounts. The year-to-date columns for encumbrances and expenditures are the totals for the entire cost center and reflect the changes from the single transactions. The unencumbered balance column represents the amount of the original appropriation that is uncommitted and available for use. The relationship among the appropriation, the year-to-date encumbrances and expenditures, and the unencumbered balance is straightforward as shown in the equation below

APPROPRIATION
\- YEAR-TO-DATE ENCUMBRANCES
\- YEAR-TO-DATE EXPENDITURES
= UNENCUMBERED BALANCE

The equation simply says that what you start out with (appropriation amount) less what you have committed to date (YTD encumbrances) less what you have spent to date (YTD expenditures) equals what you have left to spend (unencumbered balance).

Illustration of Encumbrance Procedures

An example of these procedures is shown in Table 7.3. The total appropriation of $1,000,000 is recorded on the first line as the first item. Since nothing has been charged against or spent from this account yet, the unencumbered balance is equal to the original appropriation. The second item is to record annual salary contracts of $800,000 against the appropriation. The amount is recorded in the single encumbrance column and in the year-to-date encumbrance column as well. Since it is the first encumbrance, the single and year-to-date amounts are the same. The unencumbered balance now changes to reflect the salary commitments that have to be paid. In accordance with the equation above, the $200,000 is the result of

TABLE 7.3

Encumbrance Example Worksheet

				minus	*minus*	*equals*	
		Appropriation		YTD Encumbrance	YTD Expenditure	Unencumbered Balance	
Item	Item	Appropriation	Single Encumbrance	Single Expenditure	YTD Encumbrance	YTD Expenditure	Unencumbered Balance	% Remain
1.	Record appropriations to start year	$1,000,000			$0	$0	$1,000,000	100%
2.	Record salary contracts of $800,000		$800,000		$800,000	$0	$200,000	20%
3.	Issue purchase order for equipment in amount of $30,000		$30,000		$830,000	$0	$170,000	17%
4.	Pay monthly salaries of $70,000		($70,000)	$70,000	$760,000	$70,000	$170,000	17%
5.	Receive equipment invoiced at $20,000		($30,000)	$20,000	$730,000	$90,000	$180,000	18%
6.	Cancel remaining contract of resigning staff $28,000		($28,000)		$702,000	$90,000	$208,000	21%

subtracting the salary contract amount ($800,000) from the original appropriation ($1,000,000). This indicates to the administrator that after staff salaries have been paid, $200,000—or 20 percent of the original appropriation—remains for other types of expenditures.

The third item is a purchase order for $30,000 for equipment. With the purchase order, the district has committed itself to pay for the equipment when it arrives, but at this point the actual expenditure amount is only estimated. Therefore, the purchase order amount is treated as an encumbrance until the equipment, accompanied by an invoice with the exact amount, is delivered to the district. To enter this transaction into the accounts, it is first necessary to record the purchase order amount in the single encumbrance column. The year-to-date encumbrance column is

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then updated for this new encumbrance giving a total of $830,000 in encumbered funds. This leaves $170,000 as the unencumbered balance after this transaction.

The fourth item is the payment of monthly salaries, a total of $70,000. This is an expenditure because it is an actual cash disbursement for a particular amount. The $70,000 is shown in the single expenditure column as well as the year-to-date expenditure column because it is the first expenditure of the year. However, the salary costs were encumbered at the start of the year, so this item does not represent a new transaction but rather a change from an encumbrance to an expenditure. Since the actual expenditure amount is now recorded, there is no need to reserve that amount in the encumbrances. Therefore, a $70,000 deduction is made in the single encumbrance column and the year-to-date encumbrance amount is likewise reduced. The unencumbered balance does not change in this instance since all that happened was that $70,000 in year-to-date encumbrances were shifted to year-to-date expenditures, and 17 percent of the appropriation still remains. As a check, Appropriations ($1,000,000) minus Year-to-date Encumbrances ($760,000) minus Year-to-date Expenditures ($70,000) equals Unencumbered Balance ($170,000).

For the fifth item, the equipment previously ordered arrives. The invoice is for $20,000, but a purchase order amount of $30,000 was encumbered. The procedures are the same as recording the monthly salaries in the previous item, but care must be taken to use the correct amounts for both the encumbrance and expenditure entries. In the single expenditure column, the actual amount of the equipment or $20,000 is recorded. The year-to-date expenditure column is updated for this amount giving a total of $90,000. Since the equipment ordered in the purchase order was received and the actual amount entered as an expenditure, there is no need to maintain an encumbrance for this item. Therefore, the entire amount of the original encumbrance or $30,000 is deducted in the single encumbrance column and from year-to-date encumbrance amount as well. This leaves the year-to-date encumbrance total at $730,000. Notice that the unencumbered balance has increased by $10,000 to $180,000 as a result of this transaction. The reason is easy to understand. Originally, it was estimated that the equipment would cost $30,000 and the available money from the appropriation was reduced by this amount. When it arrived, however, the actual cost was only $20,000, and this amount was charged against the account. The $10,000 difference is money that was not needed for the equipment purchase and is once again available for other purposes.

The final item in this example is the cancellation of a contract for a staff member who is resigning and will not be replaced. At the beginning of the year the entire contract amount was encumbered as part of the total staff salaries (Item 2). Now $28,000 of that amount will not be used. To show this change a $28,000 deduction is made in the single encumbrance column and also from the year-to-date encumbrance amount. No change occurs in the expenditure amounts, but the

unencumbered balance is increased by $28,000 to reflect that this amount is now free for other uses. With these changes, the basic equation remains in balance: Appropriations minus Year-to-date Encumbrances minus Year-to-date Expenditures equals the Unencumbered Balance.

While most school administrators will neither see nor work with encumbrances in this single-item format, they do need to understand both the concepts and mechanics of encumbrance accounting. As managers of programs, schools, and departments, they will deal with expenditure reports for their operations that incorporate aggregate encumbrances data for each budget account under their responsibility.

Transfers Between Budget Accounts

Rarely, if ever, will all of the actual expenditures be equal to the detailed budget estimates. As the end of the year approaches, it becomes obvious which accounts will spend more than budgeted and which will spend less. This is not necessarily a cause for concern if the overages and shortfalls among the accounts balance each other out and the total expenditures do not exceed the total appropriation. This is the case for the district as a whole and generally true for each cost center within the district.

To manage effectively, school administrators need to have flexibility to transfer budgeted monies from one account to another within their cost center responsibility. This authority is not without its restrictions, but within district policies it can provide administrators with an effective device for reallocating monies under their control for improved programs.

The transfers can be explicit accounting transactions involving changes in the original budget allocations or implicit transfers where the administrator approves overspending by one department and restricts spending in another to compensate. In either case, the results are the same: Spending approval is shifted from one area to another.

The rules for transfers among accounts vary among school districts depending on their policies. Table 7.4 presents examples of restrictions districts may place on an individual administrator's authority to implement transfers. These rules illustrate varying degrees of freedom for individual administrators in managing their operations and control of expenditures by higher administrative levels in the school district.

The first example is clearly the least restrictive and gives administrators the maximum flexibility in controlling their operations. The restrictions on shifts among functions is intended to keep the monies used for the same general purposes as appropriated unless the school board is consulted and approves the change in spending. Similarly, the restrictions on monies spent for personnel and

TABLE 7.4

Examples of Budget Account Transfer Policies

1. No constraints except to stay within the total budget for the cost center.
2. No transfers among major functions. Appropriations for instruction cannot be transferred to support services or vice versa without board approval.
3. No transfers in or out of salary accounts. Appropriations for personnel cannot be shifted to other types of expenditures and vice versa without central office or board approval.
4. No transfers in or out of equipment. Appropriations for equipment cannot be shifted to other types of expenditures and vice versa without central office or board approval.
5. No transfers permitted without district office approval.

equipment give district administration and the school board control over two key expenditure areas. The last example provides the maximum district control; the cost of exerting this extensive control can be additional administrative time for preparing and reviewing more paperwork.

Management Information and Reporting For Control

A wide variety of reports can be prepared to assist school board members, school administrators, other district staff, and district patrons in monitoring and understanding the implementation of the budget. They all provide information thought to be relevant in evaluating the financial condition of the district and the fiscal performance of administrators. The reports should be designed to fit specific district needs and meet any state or federal reporting requirements. They rely on information in the accounting system that is summarized, analyzed, and presented in a useful format. A report that no one understands or uses is a waste of time and money.

Expenditure Reports

Probably the most important type of report for budget control is the expenditure report. These reports generally compare the expenditures and encumbrances to date with the budget amount for the account. They allow the responsible manager to monitor spending and prevent unwanted overexpenditures.

Expenditure reports can be prepared in a number of formats, depending on the emphasis desired. They can feature expenditures summarized by function or subfunction, by object, or by cost center. Further, they can provide reports that combine several of these dimensions to give more detailed expenditure informa-

tion about particular aspects of the district's operations. This is possible because the accounting system records expenditures along function, object, and cost-center dimensions. Expenditure records can be combined in any number of ways to produce different kinds of expenditure reports.

Expenditures by function. As one example, a report can summarize expenditures by function across the district—elementary instruction (function 1110), middle school instruction (function 1120), high school instruction (function 1130), and so forth through each of the functions in the district's accounts. Table 7.5 shows a sample expenditure report of this type presenting the budgeted amount, the actual expenditures and encumbrances to date, and the remaining balance by function for a school district. Note that this district's (and state's) accounting system incorporated program, function, and level of instruction into a single item for accounts in the instruction area.

This report is an actual example of one prepared monthly by the district and presented to its school board to keep members informed of the district's expenditure status. As shown in the report, with only one month remaining in the school year, the district still has just over 17 percent of its budget unspent. Unless significant expenditures are planned during the last month, the district will most likely end up underspending its budget. If further detail about under- or over-budget functions is desired, subreports can be prepared to present expenditure data by subfunction. For example to investigate why each of the instructional programs is substantially under budget, the district can prepare a report that presents expenditure data by academic area within each level of instruction—mathematics, language arts, social studies, and others within the high school. Depending on circumstances, the situation could represent either an efficient use of district funds and a substantial savings to the taxpayers, or an unwise effort to reduce instructional expenditures more than necessary.

Expenditures by object Another type of expenditure report is a summary report by object of expenditure. In this report the year-to-date expenditures and encumbrances in each object account are compared with the amount budgeted for that account. A report of this type presents data aggregated by each object account used by the district, for example, salaries of regular employees (object 110), salaries of temporary employees (object 120), salaries for overtime (object 130), and so forth through the entire list of object accounts. Similar reports can be developed for each cost center in the district's operation where the total expenditures by object of the cost center are summarized and compared with the budget allocation.

Expenditures by cost center. While the function and object expenditure reports present aggregate information and can identify possible trouble spots, they do not provide sufficient detail for much specific management action. If the total supply expenditures in the district, for example, are approaching an overexpenditure condition, which cost centers are causing the problem? If a

TABLE 7.5

Expenditure Report, Budget Comparison by Function

Green Valley School District

Budget Balance for May 2, 1998

FUNCTION CODE	DESCRIPTION	1997-98 BUDGET	EXPEND. TO DATE	DIFFERENCE	PERCENT REMAIN
1110	Elementary Program	$1,387,023	$1,118,952	$268,071	19.3%
1120	Middle School Program	757,613	638,646	118,967	15.7%
1130	High School Program	1,087,885	921,285	166,600	15.3%
1210	Mentally Retarded	34,148	33,911	237	0.7%
1220	Physically Handicapped	5,400	2,333	3,067	56.8%
1240	Learning Disabilities	90,919	61,426	29,493	32.4%
2110	Attendance Services	25,713	19,695	6,018	23.4%
2120	Guidance Services	86,694	73,107	13,587	15.7%
2130	Health Services	15,440	12,676	2,764	17.9%
2210	Improvement of Instruction	83,025	60,357	22,668	27.3%
2220	Educational Media	278,545	233,715	44,830	16.1%
2310	Board of Education Services	26,570	16,088	10,482	39.5%
2320	Executive Administration	101,324	99,560	1,764	1.7%
2410	Office of Principal Services	590,495	499,774	90,721	15.4%
2510	Fiscal Services	97,139	80,781	16,358	16.8%
2520	Purchasing Services	28,250	10,512	17.738	62.8%
2530	Warehousing & Distributing	21,600	15,708	5,892	27.3%
2620	Care/Upkeep of Bldg.	893,940	755,802	138,138	15.5%
2630	Care/Upkeep of Grounds	30,983	26,006	4,977	16.1%
2640	Care/Upkeep of Equipment	25,808	26,613	(805)	-3.1%
2660	Security Services	13,000	9,370	3,630	27.9%
2700	Student Transportation	376,628	312,144	64,484	17.1%
2820	Information Services	86,635	83,840	2,795	3.2%
2840	Data Processing Services	6,283	6,909	(626)	-10.0%
4800	Gen. Fund Contingency	50,000	0	50,000	100.0%
	TOTALS	$6,201,060	$5,119,210	$1,081,850	17.4%

school is spending more than its budget, what types of expenditures are to blame and can the principal be held accountable? To answer these types of questions, expenditure reports are needed that present specific information about the operations in question and locate administrative responsibility for them. These are obtained by combining several accounting dimensions into a single report. To tie the report to specific administrative responsibility, one of the dimensions should be the cost center. For example, a cost center report could show expenditures for a single school (cost center) detailed by function and by object. While breadth is lost by focusing on a smaller segment of the operation, much more useful management information is gained for monitoring and understanding that component.

Table 7.6 provides an example of a district expenditure report combining function, object, and academic department data into a single cost-center report for a given school. This report is prepared every two weeks and is distributed to the building administrators for each school as well as to the central office administration.

The identifying information is at the top of the report. It is a report for Cost Center 031, North High School. This excerpted portion of the report, prepared on April 29, 1998, covers Function 1100, Regular Instruction. It should be noted that the complete report contains all expenditures related to this cost center and includes other objects for Regular Instruction (e.g., Field Trips, Repairs for Instructional Equipment, Conference Travel, Books, and Periodicals), as well as all other functions that have expenditures in the school (e.g., Special Programs Instruction, Educational Media Services, Office of the Principal).

The column headings specify the information contained in the body of the report. This section shows expenditures for General Supplies, Object 610. Subject Matter is the next level of detail shown on the report. The code numbers represent the instructional departments in the high school and are identified in the subject description column.

The financial information presented in the budget follows a similar format to the previous example, but in summary form. The budget column provides the budgeted amount established for the General Supplies object in each department. The year-to-date encumbrances and expenditures columns give the annual totals committed or spent. The monthly expenditures column shows the most recent expenditures; the unencumbered balance columns show both the dollars and percent of budget remaining at the time of the report.

How would a manager use this report to help control expenditures in the school? The supplies accounts are a useful example. They are frequently the largest discretionary expenditure at the school level. Reviewing the unencumbered balance column to check the status of past spending and available dollars for each department reveals a wide variety of results. With only about one month to go in the school year, no department is precisely on budget. Two departments, Industrial Arts and Physical Education, have spent well beyond their supplies budget. In

TABLE 7.6

Cost Center Expenditure Report

Cost Center
031 North High School

Function
1100 Regular Instruction

04/29/98
Page 3

Code	Object	Code	Subject	Budget	Year-to-Date Encumbrances	Year-to-Date Expenditures	Monthly Expenditures	Unencumbered Amount	Balance Percent
610	General Supplies	01	Agriculture	1,800.00	16.50	573.98	374.48	1,209.52	67.2%
610	General Supplies	02	Art	5,700.00	108.70	6,066.12	595.58	(474.82)	-8.3%
610	General Supplies	03	Business	310.00	195.80	1,449.85	4.68	(1,335.65)	-430.9%
610	General Supplies	05	English Language Arts	8,425.00	294.24	4,216.12	301.04	3,914.64	46.5%
610	General Supplies	06	Foreign Language	650.00		100.00		550.00	84.6%
610	General Supplies	07	Health Occupations	1,477.00		1,543.27		(66.27)	-4.5%
610	General Supplies	08	Physical Education	7,300.00	1,275.00	9,289.34	347.50	(3,264.34)	-44.7%
610	General Supplies	09	Home Economics	4,263.50	600.00	2,722.97	254.68	940.53	22.1%
610	General Supplies	10	Industrial Arts	3,920.00	840.94	6,940.83	164.59	(3,861.77)	-98.5%
610	General Supplies	11	Mathematics	1,779.00	160.00	1,808.10	18.00	(189.10)	-10.6%
610	General Supplies	12	Music	6,230.00	392.02	6,650.73	183.31	(812.75)	-13.0%
610	General Supplies	13	Natural Sciences	5,000.00	559.03	5,238.43	30.00	(797.46)	-15.9%
610	General Supplies	14	Office Occupations	1,425.00		315.00		1,110.00	77.9%
610	General Supplies	15	Social Sciences	4,492.00		2,200.67		2,291.33	51.0%
610	General Supplies	17	Trades & Industrial Occ.	3,315.00	908.13	2,333.80	30.60	73.07	2.2%
610	General Supplies	21	Safety & Driver Ed.	1,500.00		1,216.12	80.48	283.88	18.9%
610	General Supplies	Center Total		57,586.50	5,350.36	52,665.33	2,384.94	(429.19)	-0.7%

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addition, the Business department has spent almost five times its original budget, although the dollar amount of overspending is not as great as the other two departments. However, there are several other departments that are well under budget at this time, Language Arts and Social Studies in particular.

The inexactness of individual departmental spending for supplies is not surprising, and by itself is not a cause for serious concern. The reason is shown in the Center Total row of the supplies section. This column total provides a summary of the supply expenditures for regular instruction for the entire school. The General Supplies subtotal indicates that the overspent departments have been largely balanced out by the departments that have underspent. If no large supply expenditures are anticipated in the final weeks of school, the principal appears to have done a reasonable job of balancing general supplies expenditures for the school as a whole. The slight overspent amount for supplies will most likely be offset by underspending in other areas of the school.

Revenue Reports

During the year it is also important to monitor the district's collection of revenues. The projection of revenues included in the budget is only an estimate. There is no guarantee that the actual revenues received by the district will equal those projected. If actual revenues are less than projected, expenditure reductions may be needed if the district does not have sufficient reserves or contingency funds to make up the differences. If actual revenues are greater than projected, additional expenditures beyond those authorized in the original budget may be possible if approved by the school board. In any event, the district needs to keep a close watch on the receipt of revenues during the year.

Revenue receipts. The basic revenue control report is a regular comparison of estimated revenues and actual revenues received to date by the district. The overall format specifies each anticipated revenue source together with the amount in the original budget, the amount received year-to-date, and the difference between the two. Often a percentage column is also included for quick reference. A sample revenue comparison report is shown in Table 7.7.

Interpretating such a report depends on administrator's knowledge of the various revenue sources, the likely timing of receipts, and the report date. The report in Table 7.7 is dated in early June, the final month of the school year. As such, it is probable that most of the revenues will have been collected. In this case, the district collected substantially more than was originally projected. A source-by-source comparison reveals that the difference is largely due to a much larger than anticipated beginning cash position, higher earnings from investments than planned, and more state basic school support and federal timber sales revenue than budgeted. These sources more than compensated for the shortfall in real estate tax collections.

TABLE 7.7

Revenue Comparison Report

Green Valley School District

Revenue Received to June 3, 1998

SOURCES

Code	Descriptor	Estimated Revenue	Year-to-Date Receipts	Difference $	Difference %
	Beginning Cash on Hand	$492,570	$1,148,276	$655,706	133.1%
1000	Revenue from Local Sources				
1110	Real EstateTaxes	3,073,095	2,850,154	(222,941)	-7.3%
1130	Income Taxes	75,000	140,647	65,647	87.5%
1500	Earnings on Investments	190,000	324,713	134,713	70.9%
1910	Rentals	3,500	4,357	857	24.5%
1950	Services Provided Other LEA's	3,000	639	(2,361)	-78.7%
1990	Miscellaneous Revenue	25,000	45,327	20,327	81.3%
2000	Revenue from Intermediate Sources				
2110	County School Fund	25,000	26,901	1,901	7.6%
3000	Revenue from State Sources				
3110	Basic School Support	2,241,000	2,448,798	207,798	9.3%
3210	Special Education Subsidy	50,600	56,645	6,045	11.9%
3310	Transportation Subsidy	31,000	35,265	4,265	13.8%
3900	Other State Subsidies	900	0	(900)	-100.0%
4000	Revenue from Federal Sources				
4800	Federal Timber Sales	110,000	307,040	197,040	179.1%
	TOTALS	$6,320,665	$7,388,762	1,068,097	16.9%

This report has its greatest value during the year, however. Monthly—or more frequent—reports allow administrators to follow actual collections, identify positive and negative collection trends early in their development, and react quickly to any serious deviation. The administrator responsible for monitoring revenue collections must be knowledgeable about the revenue collection patterns for the important district sources—current and prior year taxes, and state aid. In most states, aid is distributed according to state statute or regulation. For property taxes, a comparison with past years' collection patterns can be useful. If, for example, 40 percent of current year property taxes are traditionally collected by the end of November, and if the November revenue comparison report shows only 30 percent collected, district administrators should investigate to either explain the discrepancy (for example, the last collections were received too late to be included in the monthly report) or begin to plan any necessary expenditure reductions.

Cash flow reports. School districts take in revenues at varying times during the year depending upon due dates for property taxes, state and federal aid payment schedules, and when other revenues are received. Expenditures require payment during the year, some at regular intervals and others at irregular times. Unfortunately, the receipt of cash and the need for cash to pay the district's expenditures frequently occur at different times. During periods of the year, the district will have more cash on hand than it immediately needs. At other times, it will be short of cash to pay its bills.

Cash management attempts to smooth out the mismatch between the timing of receipts and expenditures.[2] Excess funds can be invested for short periods of time to earn interest for the district, and short-term borrowing may be necessary to cover temporary cash shortages. A proper cash management program has three major financial goals:

1. *Availability*: Ensuring cash availability (liquidity) to meet daily needs and to increase the amount available for investment purposes.
2. *Yield*: Earning the maximum return on cash invested.
3. *Safety*: Protecting the assets of the school district against loss.[3]

Two aspects of cash management are particularly relevant for budget management. First is the investment income earned through the cash management program. This represents revenue that does not have to be raised from other sources and can keep property taxes lower than they otherwise might be. Since investment income is usually a specifically budgeted revenue source, the perfor-

2. For a discussion of cash management, see R. Craig Wood, David C. Thompson, Lawrence O. Picus, and Don I Tharpe, *Principles of School Business Management*, 2nd ed. (Reston, VA: Association of School Business Officials, International, 1995), Chapter 13.

3. Ibid., *Principles of School Business Management*, p. 13-2.

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mance of the investment program can be monitored through the regular revenue comparison reports discussed above.

The second aspect is the cash position of the district during the year and most importantly at year end. The district's anticipated ending cash position will be used in budget planning as a revenue source in the upcoming year's budget. Significant deviations from planned amounts will disrupt next year's budget. Too much cash at year end can sometimes cause as many problems as a shortfall. An unfortunate, but true, episode concerns a district that ended the fiscal year with $1 million more than originally projected in their ending cash balance. Unfortunately, this was discovered just before the end of the school year and only weeks before a tax levy election was scheduled. The media and district voters interpreted this as the district suddenly finding an extra million dollars. The opponents of the levy election felt validated in their claims that the district did not need more money if they had an extra million lying around. The outcomes were that the district lost the election, and the superintendent and the business manager lost their jobs. What is most unfortunate about this situation is that it was a failure of communication, not necessarily management. Normally, a million-dollar savings would be a laudable event and the superintendent who created it would perhaps deserve a raise. Instead, it was interpreted as administrative incompetence and deceit.

The moral of this tale is not to be perfect in your projections; that is unrealistic. Rather, it is to keep district management informed of the current and projected ending cash position. This can be accomplished through regular reports to the top district administrators and the school board notifying them of the present amount of cash on hand and projecting what the cash balance will be at the end of the year. The ending cash balance is projected by taking the current amount, adding anticipated revenues still to be received, and deducting planned expenditures. Deviations from earlier projections should be identified and explained as early as they are known. In this way no unpleasant and avoidable surprises will occur.

Financial Reports

The expenditure and revenue reports discussed above are prepared for the principal purpose of management control. They are for *internal* use primarily and serve to keep administrators and school board members informed about the status of the district's spending and revenue collection activities as compared to the approved budget amounts. In addition to these types of reports, the district prepares another series of reports that have *external* uses as well. These are the district's financial statements. They are designed to present the financial condition of the school district not only to district staff and administrative officers, but also to the school board and public at large.

At regular intervals during the year the district should prepare and submit to the school board *interim financial statements*. Separate financial statements are

prepared for each fund used by the school district. These reports present the district's financial status as of the date they are prepared. If used, the district decides the timing of the interim statements; some districts will prepare them quarterly, although monthly preparation is recommended.[4] These reports, prepared on a regular schedule and in a consistent format, allow the board members and district administrators to assess the strength of the district's financial condition.

At year's end, the district should prepare a set of *general-purpose financial statements* that summarize the district's financial activities for the year and its financial position as of the last day of the fiscal year. These statements are discussed in detail in Chapter 3. Guidelines for preparing these reports have been established by the Governmental Accounting Standards Board and the Association of School Business Officials. The financial statements recommended to be included are:

1) Combined Balance Sheet—All Fund Types and Account Groups
2) Combined Statement of Revenues, Expenditure and Changes in Fund Balances—All Governmental Fund Types and Expendable Trust Funds
3) Combined Statement of Revenues, Expenditures and Changes in Fund Balance-Budget and Actual—General And Special Revenue Types
4) Combined Statement of Revenues, Expenses and Changes in Fund Equity—All Proprietary Fund Types and Non-Expendable Trust Funds
5) Combined Statement of Changes in Financial Position—All Proprietary Fund Types and Non-Expendable Trust Funds[5]

The statements must be prepared in accordance with generally accepted accounting principles. In addition to the specified financial statements, the annual report should contain an independent auditor's report of their examination of the district's financial statements and records. The auditor's report ensures that the information presented is valid, fairly stated, and accurately reflects the district's financial position.

Summary

The district budget and the management reports generated from the accounting system provide vital information to administrators. The reports serve as a fiscal scorecard to tell how the operation is performing. Administrators can keep track of what is happening financially through a regular review and analysis of expenditure and revenue reports. However, to be able to do this, administrators need to understand the format and language of the reports and be able to interpret the

4. R E. Everett, Raymond Lows, and Donald Johnson, *Financial and Managerial Accounting for School Administrators* (Reston, VA: Association of School Business Officials, International, 1996, Chapter 24, p.3.)

5. Fowler, *Financial Accounting for Local and State School Systems 1990*, pp. 123-124.

data presented.

While administrators need to use the management reports available to them, it is not necessary that they personally study each number in detail. Someone else can be delegated the task of reviewing the reports for an administrator, but he or she should be aware of the critical elements to monitor. For example, a school principal may delegate to an administrative assistant or budget clerk the task of reviewing the specific items on the building expenditure report, but the principal should be informed of the overall situation—total expenditures for supplies versus the school budget amount—and of any possible trouble areas.

An efficient way of using management reports is on an exception basis. The idea is to focus on potential problem situations and leave the others alone. Areas that are performing according to expectations financially do not need management attention. Rather administrators should concentrate their time on those areas that deviate from planned performance. Consistent with this approach, reports should be reviewed to identify areas in which the results are out of line with expectations. Look for red flags that identify problem areas. Don't use limited administrative time on areas that are performing well.

Another suggestion for using the management reports is to concentrate on the large amounts. Be more concerned about the absolute dollar amount of the deviation than the percentage deviation. It is much better to have a $100 account overspent by 100 percent than to have a $20,000 account overspent by 5 percent.

Above all, administrators need to be able to use this information to manage and improve their programs. Financial reports are a means to an end. Expenditure reports, in particular, identify budgetary constraints and how close the operation is to reaching those constraints. With information about the balance remaining in each account, the administrator can make informed decisions and tradeoffs among different program areas. For example, a high school principal can approve overexpenditures for the foreign language department if the mathematics department is sufficiently under budget. Or, the student transportation office may be permitted to purchase a microcomputer if lower fuel costs have resulted in less expenditures than budgeted for gasoline for the buses.

Problems

1. Trapper Point Union High School District
   In the first two months of the 1998-99 school year, Trapper Point UHSD experienced the transactions listed below in the General Fund Support Services area. Using an encumbrance reporting format (see Table 7.2), calculate the effect of each transaction on expenditures, encumbrances, and unencumbered balance.
   a. The district school board appropriated $3,440,000 for support services in the General Fund.

b. Personnel contracts in the amount of $2,230,000 were encumbered.
c. Benefits associated with the personnel contracts were also encumbered in the amount of $670,000.
d. Purchase orders for educational media supplies were issued for $130,000.
e. Salaries were paid in the amount of $220,000.
f. Three new instructional assistants were hired and their personnel contracts and associated benefits were encumbered in the amount of $90,000.
g. The educational media supplies were delivered with an invoice totaling $120,000. They were distributed for immediate use.
h. A contract for psychological services was made with the local Mental Health office for an amount not to exceed $40,000.
i. Two staff members resigned, and their salaries and associated benefits were released from encumbrances in the amount of $60,000.
j. Salaries were paid in the amount of $230,000.
k. Quarterly payments for employee benefits were made to various governmental agencies totaling $180,000.
l. Payment was made to the Mental Health office for $10,000.
m. A purchase order was issued for maintenance supplies and materials for $50,000.
n. The remaining portion of the contract with the Mental Health office was canceled by mutual consent.
o. Maintenance supplies and materials delivered at a cost of $55,000.

At this point, what is the maximum amount the school district could contract for new data processing equipment?

2. Expenditure Reporting in Orion High School
During the early portion of the school year, Orion High School had the following transactions:
a. The allocation to Orion High School of the General Fund appropriation for instruction was set at $1,500,000.
b. The business office reported contracts for regular certificated and noncertificated personnel were $950,000, and these were encumbered.
c. Benefits associated with these staff were calculated at $290,000 and these were also encumbered.
d. Shop equipment was ordered for $40,000 on a district purchase order.
e. The first month's salaries of $90,000 were paid.
f. A purchase order was issued for office equipment for $10,000.
g. The shop equipment arrived and the final price was $43,000.
h. The second month's salaries of $90,000 were paid.
i. The office equipment was delivered at a final cost of $9,000.

Show the cumulative effects of each of these transactions using the encumbrance reporting format shown in Table 7.2. At each step determine the year-to-date encumbrances, year-to-date expenditures, and unencumbered balance remaining.

3. Specify the budget account transfer policies utilized in your district. Do they vary by type of expenditure? What authority and constraints do principals have in making transfers between accounts in their schools?

4. Collect a sample of the reports used in your school district to monitor and control expenditures. Who in the district receives them and how often? Are they understandable, useful, and appropriate? Why or why not? What suggestions do you have for improvements?

Notes

Use of Microcomputer Models in Budgeting 8

Introduction

There are many opportunities for using microcomputer models in school district budgeting. They range from routine tasks that occur on a regular basis to special one-time analyses. This chapter focuses on small-scale models that can be developed personally by school administrators to aid them during the budgeting process. The models are based on an electronic spreadsheet, since this program fits many financial and quantitative applications useful for budgeting.

Four areas of use for microcomputer spreadsheet models are reviewed in this chapter: financial data necessary for preparing the budget; supporting data directly related to or useful for the budget; organization and revision of budget data; and special analyses. In all cases, spreadsheet models can be used to develop required data, to analyze data for inclusion in the budget, and to present budget and financial information to others for review and approval.

The district has many audiences it needs to provide information about the budget. These include board members, administrators, teachers, staff, representatives of the media, parents, and the general public. As discussed in Chapter 6 particularly in the presentation phase, data are most effectively displayed in numeric and graphic formats. In order to communicate with outside audiences, charts and graphs that illustrate the main budget points without an overwhelming avalanche of numbers can be highly effective.

The chapter provides examples of microcomputer model applications in budgeting that can be used by individual administrators, such as the business manager, a principal, or a department director in the central office. These examples are for individual administrators using personal computers and should be distinguished from the applications more appropriate for the district's data processing staff employing larger computers to would maintain accounting, payroll, student records, equipment and facility records, and personnel data.[1] While the larger systems are essential to a district's operation, they are more specialized and technical, and consequently, are beyond the scope of this chapter.

Commercially developed models for budgeting are also not considered in this chapter. Some of these can prove quite useful for administrators. Information

1. For a discussion of management information systems for school districts, see R. Craig Wood, David C. Thompson, Lawrence O. Picus, and Don I. Tharpe, *Principles of School Business Management*, 2nd edition (Reston, VA: Association of School Business Officials International, 1995), Chapter 15.

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about their operating requirements and output reports can be obtained from the developers and vendors. For example, one such model, In$ite, was developed by a major accounting firm to trace the flow of dollars in a school district.[2] Existing data from district fiscal, student, and personnel files are entered into the model, which then calculates the distribution of expenditures to the school, program, and classroom levels and provides a wide variety of reports to present the results.

In addition to budgeting, there are many other areas of school business management in which administrators can productively employ microcomputer models. These include personnel management and collective bargaining, cash flow analysis, program cost analysis, facility planning and management, risk management, purchasing decisions, student transportation, and food service operations. Clearly, all of these areas can have some impact on the district budget and overlap with the budgeting process somewhat. Although it is outside the scope of this chapter, information derived from models in these areas should be used in the budget process to the extent possible.

Use Of Microcomputer Models

Before exploring examples of microcomputer models for budgeting, it is important to note several points. First, the areas addressed are common administrative issues an administrator will likely face in developing a budget or preparing an analysis of a budget item; they are not "microcomputer" problems per se. Creation of a microcomputer model is simply an approach to deal with an issue or the need for information with less effort and perhaps greater accuracy. Second, an administrator does not need to be a computer programmer to use a microcomputer to develop these models. All of the models use electronic spreadsheets, which are readily available and easily learned.[3]

Sensitivity Analysis

In most of the examples, *sensitivity analysis*, an important analytical technique, can be used to great advantage. The technique is simple and almost intuitive, but it can be very powerful. The basic idea is that the analysis or calculations are done the first time using the best available data, including the most likely case assumptions. The analysis is then redone one or more times with some assumptions changed. The results of the two analyses are compared to see the difference in outcome caused by the change in input assumptions. For example, what would it cost the

2. Bruce S. Cooper and Associates: Robert Sarrel, Peter Darvas, Frank Alfano, and Eddie Meier, Judith Samuels, and Susan Hembuch, "Making Money Matter: A Micro-Financial Model for Determining School-Level Allocations, Efficiency, and Productivity, *Journal of Education Finance 20* (Summer 1994), pp. 66-87.

3. The models illustrated in this chapter were created using Lotus 1-2-3 97 Edition, 1997. Other spreadsheet programs (e.g., Excel, Quatro Pro) could be used as well.

district if it negotiated a 5 percent increase in the teacher salary schedule instead of a 3 percent increase? This is the "what if?" approach, and using a microcomputer model to carry out the analyses can make it feasible to test many assumptions and try many alternatives. This provides administrators with a range of possible results and can aid in making better decisions.

Planning and Analysis

In addition to analyzing past data, microcomputer models can be used for planning purposes and to analyze the possible range of future budget outcomes. Microcomputer models can be used to simulate possible events over which administrators have no control (e.g., growth in assessed value in the district) and for areas where decisions have to be made (e.g., maximum tax rate increase). Modeling gives administrators the opportunity to see the impact of different alternatives before to having to implement a particular one. Coupled with sensitivity analyses, administrators can use the models to try out a variety of possible decisions and predict the results.

Microcomputer Models

The areas selected to illustrate the use of microcomputer models for budgeting are linked to areas of the budget process:

1. The final budget document itself, which includes the budget reports and associated information needed to satisfy the Meritorious Budget Award criteria. Illustrations of these areas from actual budget documents are shown in Chapter 1.
2. The information and analyses needed in the budget development process and used to create the final document. Illustrations of these areas are shown in Chapter 4.
3. The logistics of aggregating budget components and making changes to the budget request amounts during the review and approval process.
4. Special analyses and reports relating to budget areas, such as cost estimation and analysis or election result analysis.

Additional models and reports related to budget management have been shown in Chapter 7 and are not repeated here.

Expenditure Projections

Although there are special microcomputer software programs devoted to developing expenditure projections for budgets,[4] it is not difficult to create an individual district

4. For example, see Thomas E. Sheeran, "Budgeting on the Cutting Edge: Using PCs to Improve Budget Management," *School Business Affairs* 58 (October 1992), p. 14-20.

TABLE 8.1

Changes to Function/Object Budget During Development Process

2300 Support Services—General Administration

Code	Description	Actual 1995-96	Budget 1996-97	Original Budget 1997-98	Change from Prior Year $	Change from Prior Year %	Revised Budget 1997-98	Change from Prior Year $	Change from Prior Year %
100	Salaries	1,925,052	2,038,866	2,041,226	2,360	0.1%	**2,141,226**	**102,360**	**5.0%**
200	Employee Benefits	417,051	576,567	549,159	(27,408)	-4.8%	**579,159**	**2,592**	**0.4%**
300	Purchased Prof. & Tech. Services	321,969	330,968	353,430	22,462	6.8%	353,430	22,462	6.8%
400	Purchased Property Services	25,194	24,865	25,391	526	2.1%	25,391	526	2.1%
500	Other Purchased Services	57,109	75,973	61,664	(14,309)	-18.8%	61,664	(14,309)	-18.8%
600	Supplies	58,060	118,909	99,815	(19,094)	-16.1%	**119,815**	**906**	**0.8%**
700	Property	18,259	8,921	28,852	19,931	223.4%	28,852	19,931	223.4%
800	Other Objects	59,973	55,153	63,579	8,426	15.3%	63,579	8,426	15.3%
	Total	2,882,667	3,230,222	3,223,116	(7,106)	-0.2%	**3,373,116**	**142,894**	**4.4%**

Changes

100	Salaries	**Add:**	100,000	Assistant Superintendent
200	Employee Benefits		30,000	Related Benefits
600	Supplies		20,000	Restore Allocation

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program using an electronic spreadsheet. The format is the same as the budget document and includes account code and description, past years' amounts, current-year budget amount, and proposed next-year budget amount for each budget item. Additionally, the spreadsheet file should be set up to calculate budget dollar and percentage changes and to provide appropriate subtotals and totals automatically. A sample format is shown in Table 8.1 for a standard function/object budget.

All organizational units in the district preparing budget requests should use the same microcomputer format. This allows budget submissions to be combined electronically by the business office and the results to be automatically totaled for the entire district. This is most easily accomplished by providing each unit with a copy of the budget program. They can submit their electronic budget documents either through a local area network or modem arrangement or deliver a diskette to the business office. Once the budget is complete and has been adopted by the school board, the data can be transferred electronically to the accounting records, which are usually processed by a larger computer.

Changes to the Budget

During the course of the budget development process, the numbers in the budget document undergo numerous changes as estimates are revised, decisions are made to reduce or increase certain budget categories, and new analyses are conducted. Frequently in the final stages of budget assembly, it can become difficult to keep track of all of the changes and their impact on the overall budget.

The real power of the budget in an electronic spreadsheet program comes when changes in any budget item or account are needed. When a change is considered or incorporated, the new amount is entered into the spreadsheet in place of the previous amount. The spreadsheet program then automatically recalculates all of the amounts affected by the change. The obvious advantage is that the result of the change is known instantly and no extra calculations are required. Updating the budget for changes or modifications is accomplished automatically; no recalculating or retyping is required.

For example, in Table 8.1, three changes are made to the original budget amounts: adding a new assistant superintendent ($100,000 in salary and $30,000 in benefits); and increasing the supply amount by $20,000. The new budget amounts are highlighted in the revised budget at the right of the illustration. In addition to the new dollar amounts for the three affected accounts, their dollar and percentage changes have been recalculated along with the totals for the budget function.

This rapid revision capability with a budget spreadsheet program also allows administrators and board members to investigate the effects of potential budget changes before proposing or deciding upon them. Any number of sensitivity analyses can be performed to test the impact of different budget request levels or different allocation patterns.

Revenue Projections

The revenue side of the budget can also be estimated using an electronic spreadsheet. The revenue projections should use the budget document format, which lists the individual anticipated sources of revenues along with the account code for each and the amounts received in the past several years. Individual analyses for particular revenue sources can be created and the results incorporated into the overall revenue projections. For example if the district is leasing property to other organizations, the square footage and rental price per square foot of each property can be input into a separate spreadsheet file, the calculations performed, and the results transferred to the line for Local Revenues—Rentals in the main revenue projection listing.

This type of analysis lends itself to sensitivity analyses as well. In the rental properties example above, it would be easy to test the impact of changes in price per square foot charged by the district—even on a property-by-property basis—and incorporate the results directly into the total revenue projections.

Tax Levy and Tax Rate Projections

An important consequence of revenue projections is the amount of local property tax required to support the district budget. Whether the district has a maximum amount or tax rate it may levy or whether the local property tax levy is the amount needed to balance the budget after considering all other revenues, the property tax amount is significant to administrators, school board members, district patrons and voters, and the media.

An enhancement of the basic expenditure and revenue projection models is to determine the property tax amount and tax rate required to balance the budget. This can be accomplished with an extension to the revenue projections model. As discussed in Chapter 4, the tax levy is calculated by the following general formula:

	Expenditures
-	All Revenues (except Property Tax)
+/-	Changes in Fund Balance
=	Property Tax

Using the data from the expenditure and revenue projection models and district policy or board decisions on fund balance levels, the required levy can be determined. With an additional input of the district's assessed value (actual or estimated depending on data availability) the property tax rate can also be determined. Table 8.2 illustrates the property tax model summary calculations. Note that the actual property tax levy is larger than the initial calculation amount due to an allowance for uncollectible taxes. The tax levy is based on the actual required levy amount.

TABLE 8.2

Property Tax Calculation Model

		1998-99
Expenditures (Data from Expenditure Projection model)		$57,000,000
Revenues (Data from Revenue Projection model)		
	Other Local	$6,000,000
	State	28,000,000
	Federal	3,000,000
	Total	$37,000,000
Fund Balance		
	Beginning	$2,000,000
	Ending	3,000,000
	Change	$1,000,000
Property Tax Required		$21,000,000
Collection Rate (Estimated)		95.0%
Property Tax Levy		$22,105,263
Assessed Valuation		$1,000,000,000

		1996-97	1997-98	1998-99
Property Tax Rate (mills)		19.0	20.5	22.1
Change	Mills		1.5	1.6
	%		7.9%	7.8%

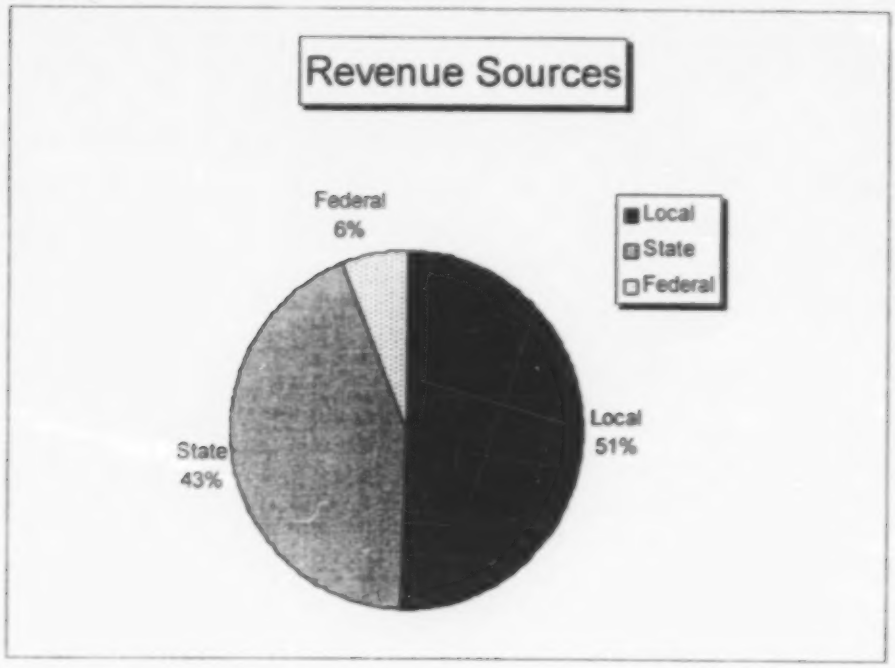
These models can be particularly useful for school board members to keep an up-to-date running total of the status of the budget and the associated local tax rate. In fact, using a microcomputer in board meetings and work sessions to furnish current budget data is not an uncommon occurrence today.

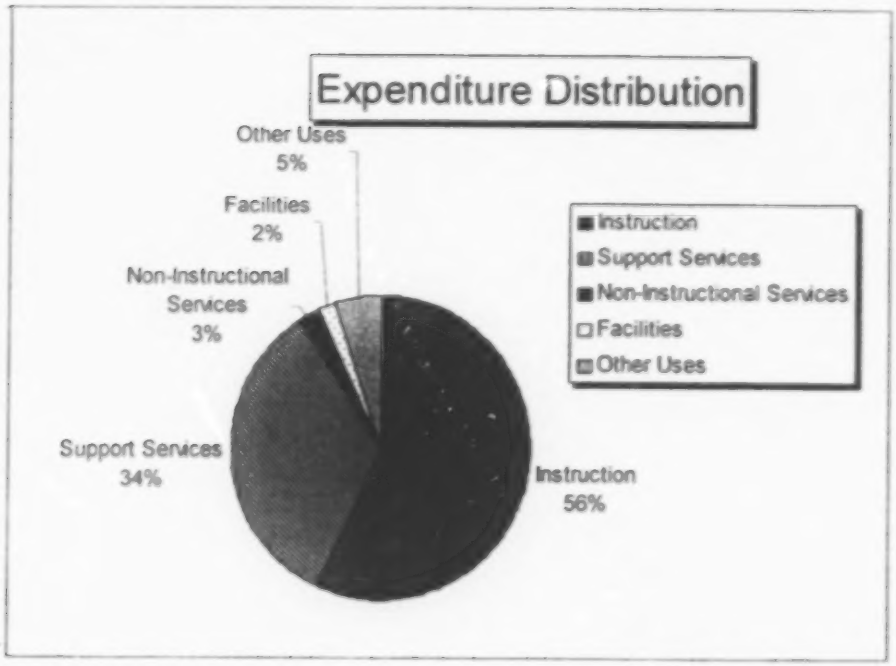
Displays of Expenditures and Revenues

Once the budget amounts have been established, it can be useful to highlight the major categories of expenditures and revenues using graphs. This presents the most important data to audiences in an easy-to-understand manner. The graphs can be readily prepared on the spreadsheet program and can be included in the

FIGURE 8.1

Revenue and Expenditure Graphs





Financial Section of the budget document.

Distribution of Revenues and Expenditures. Pie charts are an effective way to illustrate where the funds to operate schools come from and how those funds are spent. For revenues, the proportion of funding from each of the major revenue sources is calculated and graphed. The primary sources are local, state, and federal, although in some instances it may be appropriate to include intermediate and other sources, if they are significant for the district.

For expenditures, the same procedure is followed in creating a pie chart, except that expenditure categories are used. Depending on the focus district wishes to emphasize, the expenditure categories can be either functions or objects of expenditure. The graphs for both revenues and expenditures (function emphasis) are shown in Figure 8.1. If desired, additional graphs can be created showing further breakdowns of either revenues or expenditures. For example, a pie chart can be used to demonstrate the proportion of the instructional budget (or total budget) allocated to teacher salaries and benefits, as compared to other types of instructional costs.

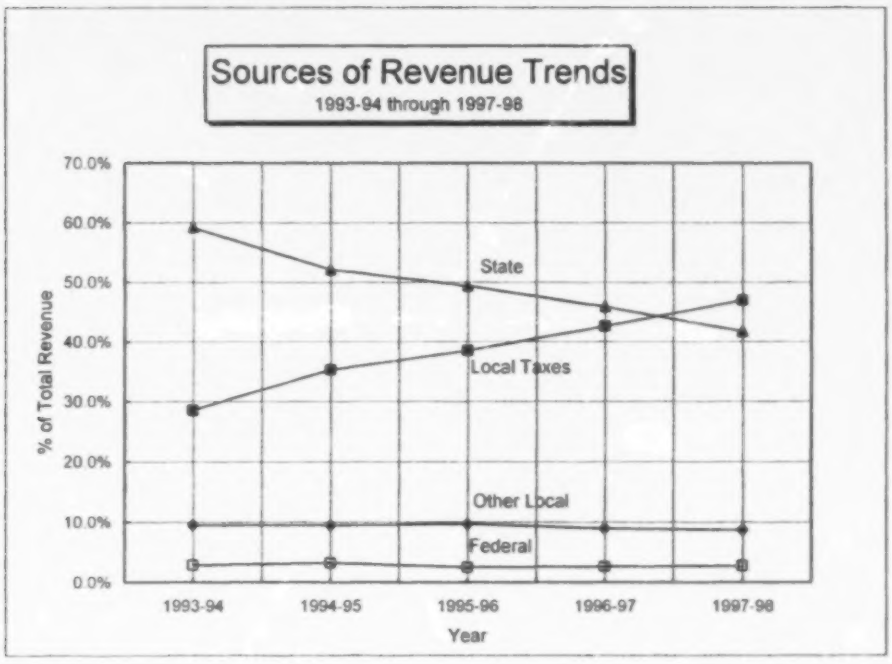
Revenue and Expenditure Trends. To put the proposed budget in context, it is helpful to provide some recent history concerning levels of revenues and expenditures. For revenues, the level of support from local taxes, other local sources, state aid, and the federal government is an often-asked question. The trends over the past several years are easily seen in graphs also and can quickly convey the message of growth or decline in various categories. Hypothetical revenue and expenditure examples are shown in Figure 8.2. In the revenue graph, the share of the budget supported by state aid has been declining for the past five years, while local taxes have had to increase to replace the relative loss of state funding. In the expenditure example, the proportion of the budget devoted to personnel costs (salaries and benefits) has been steadily increasing while supplies and property and purchased services has received a declining share of the budget. Providing this type of information to board members, media representatives, state legislators, and others can stimulate a review of past practices and possible changes in the future.

Enrollment Forecasts

The cohort survival technique can easily be set up on an electronic spreadsheet and the numbers of students projected by grade, school, and special condition. Figure 4.3 on page 110 is a spreadsheet model. The graph of these enrollment data is shown in Figure 8.3. The model results can be presented in the Information Section of the budget in both numeric and graph form. Additional sensitivity analyses could test the results for different assumptions about survival rates and first year entering students.

FIGURE 8.2

Revenue and Expenditure Trend Graphs



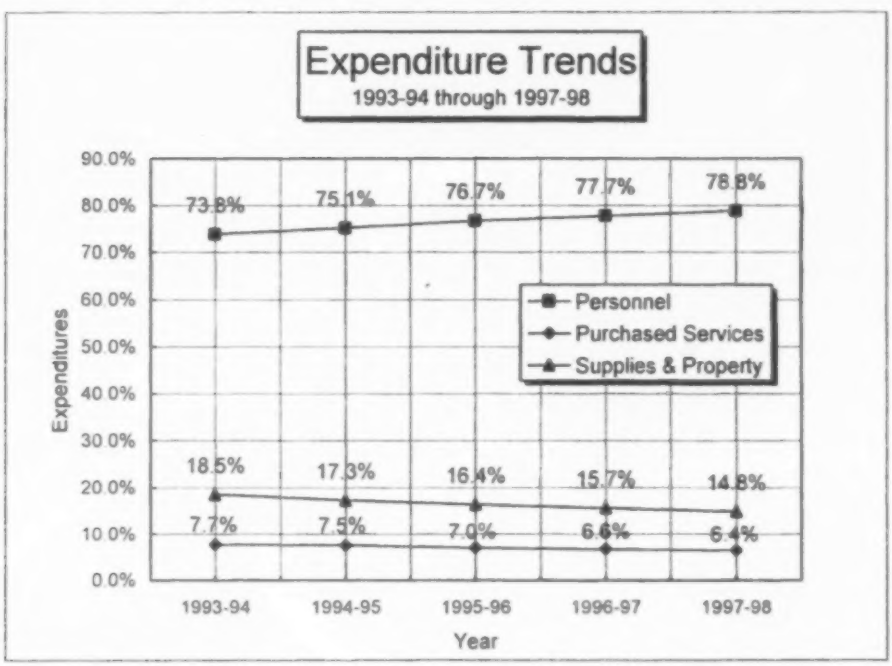
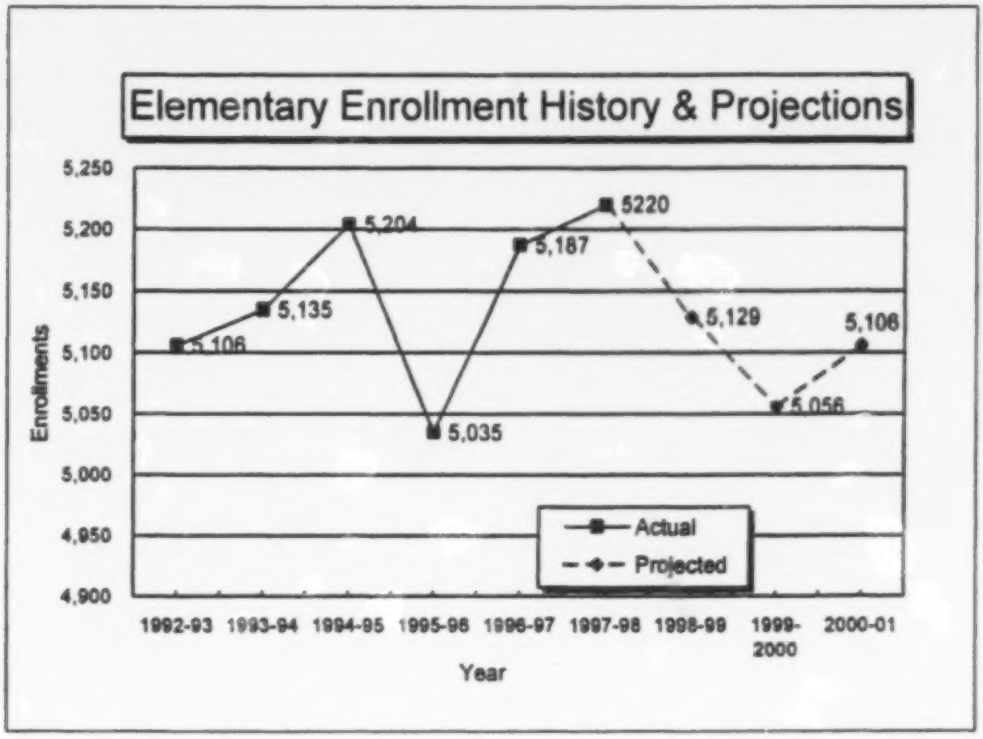


FIGURE 8.3

Enrollment Data



Personnel

There are a variety of opportunities to create and use microcomputer models for budget development and analysis in the personnel area. They range from estimation of personnel needs to estimation of salary and benefit costs.

Personnel Needs. Since personnel costs are the largest component of the budget, accurately determinating the number of personnel required is essential for an effective and efficient operation. This is particularly true for the instructional staff as they comprise the bulk of the district personnel. Too few teachers and the educational program suffers with overcrowded classes and inadequate attention to student needs; too many teachers—if this is possible—and costs are inflated, and there may be a shortage of classroom space. As discussed in Chapter 4, needs for instructional personnel are most commonly determined through district policies covering student/teacher ratios. Table 8.3 shows a projection model, which uses the projected number of students and student/teacher ratios to calculate the number of teachers needed at each level.

In this model the actual student/teacher ratios for the past three years are calculated to provide historical data. The model then projects the number of teachers needed for the next three years using the projected number of students

TABLE 8.3

Instructional Personnel Projections

STUDENTS	Actual 1995-96	Actual 1996-97	Actual 1997-98	Projected 1998-99	Projected 1999-2000	Projected 2000-01
Elementary	5,035	5,187	5,220	5,129	5,056	5,106
Middle	2,518	2,597	2,739	2,765	2,897	2,973
High	3,357	3,463	3,651	3,688	3,863	3,965
Total	10,910	11,247	11,610	11,582	11,816	12,044
STUDENT/TEACHER RATIOS						
Elementary	27.2	27.6	27.5	27.5	27.5	27.5
Middle	26.5	26.2	25.8	25.8	25.8	25.8
High	24.0	23.2	23.1	23.1	23.1	23.1
TEACHERS						
Elementary	185	188	190	187	184	186
Middle	95	99	106	107	112	115
High	140	149	158	160	167	172
Total	420	436	454	454	463	473

NEW TEACHERS REQUIRED				3 Yr Total
Elementary	-4	-2	2	-4
Middle	1	5	3	9
High	2	7	5	14
Total	-1	10	10	19

ALTERNATIVE PROJECTIONS WITH REDUCED STUDENT/TEACHER RATIOS

STUDENT/TEACHER RATIOS	Projected 1998-99	Projected 1999-2000	Projected 2000-01
Elementary	26.5	25.5	24.5
Middle	25.1	24.4	23.7
High	23.1	23.1	23.1
TEACHERS			
Elementary	194	198	208
Middle	110	119	125
High	160	167	172
Total	464	484	505

NEW TEACHERS REQUIRED				3 Yr Total
Elementary	4	4	10	18
Middle	4	9	6	19
High	2	7	5	14
Total	10	20	21	51

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and the current student/teacher ratios. The initial model run, using the current student/teacher ratios, shows an overall need for 19 new teachers over three years. The total reflects a decline of four elementary teachers, reflecting the projected drop in the number of elementary students, and increases of nine middle school and fourteen high school teachers.

The real benefit of this model is to be able to do sensitivity analyses. In this case, assume that a board member has questioned the higher student/teacher ratios at the elementary and middle-school levels and wants to know the impact on personnel needs if these ratios were reduced over three years to approach those in the high school. The bottom section of Table 8.3 provides this information. The changes in the model are shaded. Student/teacher ratios for elementary and middle levels are changed, and this results in new numbers of teachers required at these levels. To reduce the elementary ratio to 24.5 and the middle ratio to 23.7 over three years would require an additional 32 teachers over the base case: 51 teachers with reduced ratios, and 19 teachers with current ratios. The largest increase would be at the elementary level where 22 new teachers would be needed. Additional ratio changes could be tried by putting new values in the appropriate cells in the model.

Salary Schedules and Costs. The district salary schedule for teachers can be created as a microcomputer spreadsheet file. The same can be done for administrators and classified personnel. An example of a teacher salary schedule is shown in Chapter 4. The file should be constructed using the district's unique number of educational and experience steps in the salary schedules. Once the schedule is constructed, sensitivity analyses can be carried out to test the impact of different possible changes for the next year. The most common changes to examine would be increases in the base salary level, step increases, or education level amounts. Another type of sensitivity analysis could consider the financial impact of modifying the number of steps or changing the amounts between steps in any of the schedules. Frequently, possible changes in salary schedules are associated with contract negotiations; in this case, it is necessary to examine the effects over the duration of the new contract. This involves establishing separate schedules for each year, although they should be located in the same spreadsheet file for easy manipulation.

An important issue with changes in salary schedules is the impact on salary costs. The procedure and model for calculating teacher costs from salary schedules and personnel data is shown in Chapter 4. The analysis consists of establishing matching files with the number of personnel at each step in the salary schedule for each year. This involves projecting the number of personnel at each step for the upcoming year, and then projecting the salary costs based on the number of personnel at each step and the salary for that step next year.[5]

5. For a discussion of salary schedules, see William Hartman and Seldon Whitaker, Jr., "An Analytical Model for Negotiating Teacher Salary Schedules," *Journal of Collective Negotiations* 20(1)(1991), pp. 69-88.

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An extension of salary expenditure projections would be to include employee benefits. Many of the necessary data are common with the salary projections. By adding specific benefit information along with numbers of personnel, it would be possible to develop separate, but linked benefit estimates.

Budget Management Reports

In addition to the examples in Chapter 7, other types of budget management reports can usefully be developed on a microcomputer. A cash flow analysis[6] for the district's funds is a good example. Either a commercially developed or a district developed electronic spreadsheet-based program will allow a district financial officer to project the anticipated inflows and outflows of cash and to plan the amount and timing of short-term investments. In addition, the estimated amount of interest earned investments and interest paid on borrowings will feed into budget projections.

At the school level a supplemental reporting system for departmental expenditures (e.g., purchased services, supplies, equipment) is often useful for building administrators if the district prepared reports are not received in a timely fashion. The school records can also be used to check the district reports for accuracy and completeness. Again, a relatively simple spreadsheet program can be developed. The report would be organized around school departments (e.g., language arts, mathematics, counseling, administration) and would maintain for each department a record of the original budget, each expenditure and encumbrance charged against that department's accounts, and the amount remaining in the accounts. The departmental data can be combined into a school summary. Prior to approving a departmental expenditure request during the year, administrators can check the department's account to make sure that sufficient money remains in the account to cover the expenditure.

Property Tax Information

The MBA Criteria call for information concerning property taxes to be presented in the Information Section of the budget. This includes data on property values, property tax rates, collections, and the impact on taxpayers. The purpose is to assist board members, taxpayers, media representatives, as well as district personnel in understanding the key features concerning the property tax used by the district. To demonstrate this approach, two different hypothetical examples are given. For consistency, both examples use the same base data.

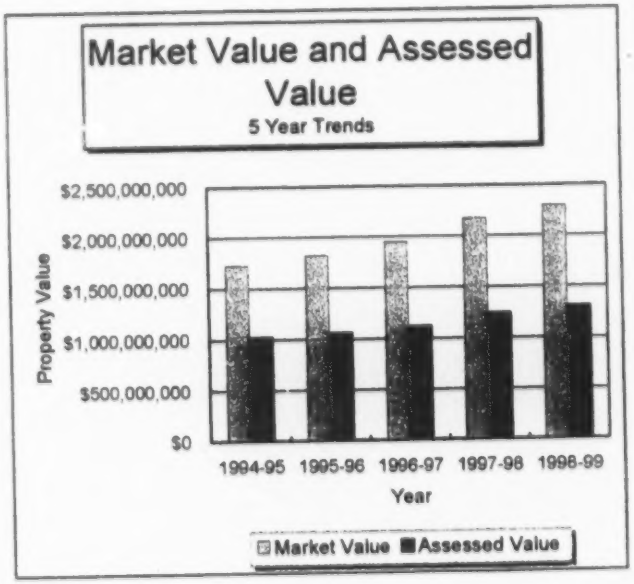
In Figure 8.4, two types of data are provided for the latest five-year period: property values and property tax information. Both types of data are graphed at the bottom of the figure to illustrate the trends for easy recognition. The basic

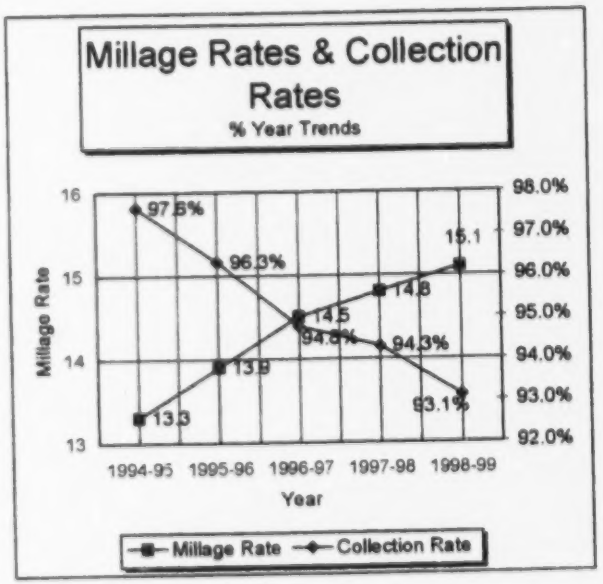
6. R. Craig Wood, David C. Thompson, Lawrence O. Picus, and Don I. Tharpe, *Principles of School Business Management*, 2nd edition (Reston, VA: Association of School Business Officials International, 1995), Chapter 13 provides a review of cash flow principles and practices.

FIGURE 8.4

Property Tax Information

Year	Market Value	Assessed Value	% AV/MV	Millage	Total Tax Levy	Current Tax Collections	% of Levy Collected
1994-95	$1,728,662,400	$1,019,757,500	59.0%	13.3	$13,562,775	$13,240,890	97.6%
1995-96	1,819,803,167	1,059,409,767	58.2%	13.9	$14,725,796	14,185,013	96.3%
1996-97	1,945,364,167	1,118,376,333	57.5%	14.5	$16,216,457	15,369,186	94.8%
1997-98	2,172,832,367	1,240,244,500	57.1%	14.8	$18,355,619	17,309,470	94.3%
1998-99	2,291,762,800	1,301,930,333	56.8%	15.1	$19,659,148	18,308,219	93.1%





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data are given first. These report the market and assessed value of property in the district along with a calculation of the percentage that assessed value represents of market value. Although both values show increases over the five-year period, there has been a slight declining trend of assessed value as a percentage of market value over the time period. This could represent an assessment process that does not keep up with current market trends. Second, the millage rate and the total tax levy that it generated are shown together with the actual collection amounts and the collection rates. Two different trends, which may be linked, are shown in the graph: millage rates have been steadily increasing while collection rates have been falling. While the data do not necessarily show a cause and effect relationship, they do indicate areas for potential management attention.

Figure 8.5, which has more of a public relations emphasis, focuses on the affect of the property tax levy on an average taxpayer. A $100,000 home was selected to illustrate the tax impact, but other values could serve as well. Some districts use several different values to show the tax impact over a range of home valuations. In this example, the combination of a declining ratio of assessed value to market value and a rising millage rate yield a slight annual increase in the property tax bill to the average homeowner. Showing the average increase in terms of a small dollar amount puts the tax growth in perspective. For the example given, the annual increases (approximately $11 to $25) translate into one to two dollars per month.

Bond Amortization Schedule

Another requirement from the MBA Budget Criteria is to provide the Bond Amortization Schedule in the Information Section of the budget. The data should be available from district documents and can be easily placed in a spreadsheet and also shown graphically. Figure 8.6 illustrates this procedure. In this example, the district has two outstanding bond issues and the principal, interest, and total amount are shown for each along with the total district annual debt service. The graph at the bottom shows the declining debt service requirements from the current bond issues over time.

Budget Forecasts

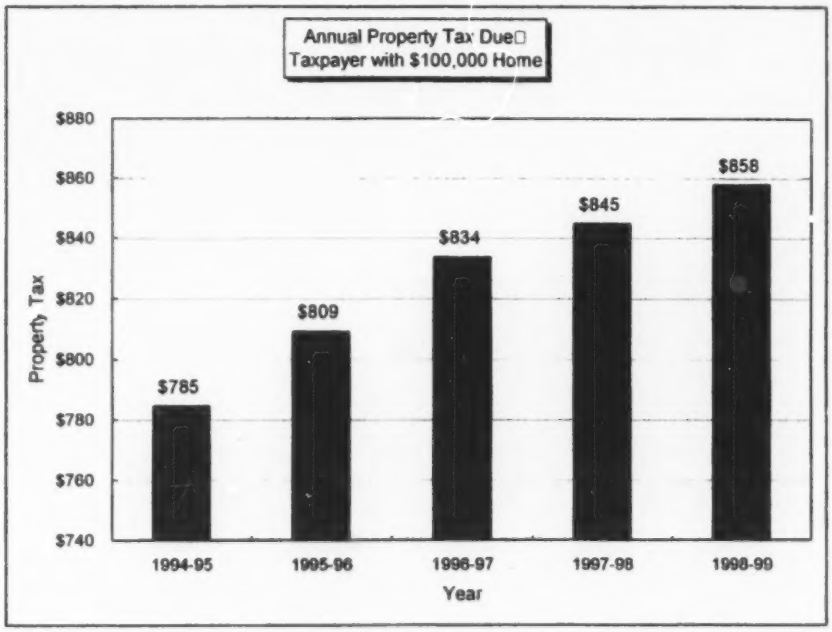
While the budget document only covers the upcoming year, the school district is an ongoing entity and will continue for years into the future. Consequently, the short-term focus of the budget does not provide information concerning impending or potential changes in the revenue base or expenditure patterns. Neither does it show the future impacts of current budget decisions.[7] As a result, the MBA Criteria call for a three-year forecast to be included in the budget document.

7. Dennis Strachota, *Standards of Excellence in Budget Presentation* (Reston, VA: Association of School Business Officials, International, 1996), 91-92.

FIGURE 8.5

Resource-Cost Model Example

	Actual 1994-95	Actual 1995-96	Actual 1996-97	Actual 1997-98	Budget 1998-99
Market Value of Home	$100,000	$100,000	$100,000	$100,000	$100,000
% Assessed Value of MV	59.0%	58.2%	57.5%	57.1%	56.8%
Assessed Value of Home	$58,991	$58,216	$57,489	$57,080	$56,809
Tax Rate (Millage)	13.3	13.9	14.5	14.8	15.1
Property Tax Due	$785	$809	$834	$845	$858
Change from Prior Year		$25	$24	$11	$13



The forecast is of necessity less detailed than the full budget and is included to show the general effects of assumptions about various revenue and expenditure expectations in the next several years. It is more of a planning tool to show board members and others the results of continuing current policies and/or proposed changes with fiscal implications.[8] Some of the possible changes may be under the control of the district (e.g., average salary increases) and others may not (e.g., increases in basic state aid).

8. See Donald C. Mecure, "Multi-Year Budget Forecasting," *School Business Affairs* Vol. 61, no. 11 (November 1995), p. 45-50, for a description of a forecasting model for a school district.

FIGURE 8.6

Debt Service and Amortization Schedule

Type of Bonds	Issue Date	Purpose	Remaining Principal
General Obligation	1992	New Middle School	$36,400,000
General Obligation	1997	Remodeling Elementary Schools	$21,500,000

Payment Schedule

Fiscal Year	1992 Series			1997 Series			District Total
	Principal	Interest	Total	Principal	Interest	Total	
1998	2,600,000	2,912,000	5,512,000	1,075,000	1,505,000	2,580,000	8,092,000
1999	2,600,000	2,704,000	5,304,000	1,075,000	1,429,750	2,504,750	7,808,750
2000	2,600,000	2,496,000	5,096,000	1,075,000	1,354,500	2,429,500	7,525,500
2001	2,600,000	2,288,000	4,888,000	1,075,000	1,279,250	2,354,250	7,242,250
2002	2,600,000	2,080,000	4,680,000	1,075,000	1,204,000	2,279,000	6,959,000
2003	2,600,000	1,872,000	4,472,000	1,075,000	1,128,750	2,203,750	6,675,750
2004	2,600,000	1,664,000	4,264,000	1,075,000	1,053,500	2,128,500	6,392,500
2005	2,600,000	1,456,000	4,056,000	1,075,000	978,250	2,053,250	6,109,250
2006	2,600,000	1,248,000	3,848,000	1,075,000	903,000	1,978,000	5,826,000
2007	2,600,000	1,040,000	3,640,000	1,075,000	827,750	1,902,750	5,542,750
2008	2,600,000	832,000	3,432,000	1,075,000	752,500	1,827,500	5,259,500
2009	2,600,000	624,000	3,224,000	1,075,000	677,250	1,752,250	4,976,250
2010	2,600,000	416,000	3,016,000	1,075,000	602,000	1,677,000	4,693,000
2011	2,600,000	208,000	2,808,000	1,075,000	526,750	1,601,750	4,409,750
2012				1,075,000	451,500	1,526,500	1,526,500
2013				1,075,000	376,250	1,451,250	1,451,250
2014				1,075,000	301,000	1,376,000	1,376,000
2015				1,075,000	225,750	1,300,750	1,300,750
2016				1,075,000	150,500	1,225,500	1,225,500
2017				1,075,000	75,250	1,150,250	1,150,250

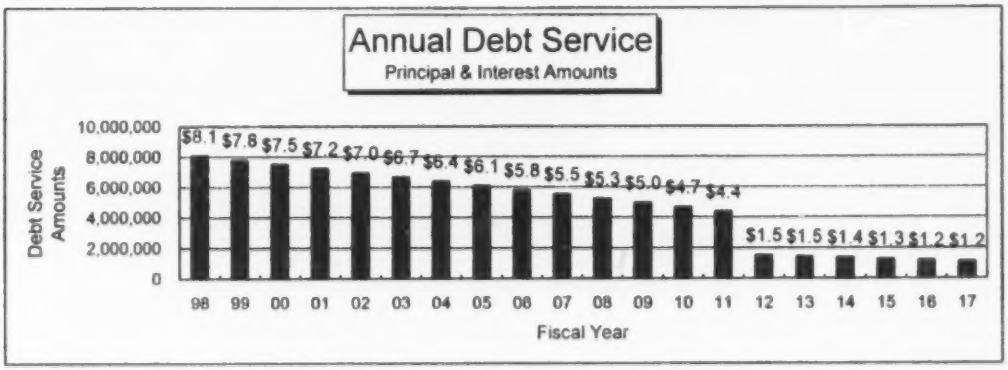


TABLE 8.4

Budget Forecast Model

$ 000	Actual 1996-97	Actual 1997-98	Projected 1998-99	Projected 1999-00	Projected 2000-01
EXPENDITURES					
Salaries	$16,944	$18,004	$18,544	$19,286	$20,250
Benefits	4,848	5,093	5,348	5,615	5,952
Professional Services	565	629	660	693	721
Property Services	3,987	4,062	4,265	4,521	4,792
Other Purch. Services	338	403	415	428	436
Supplies	2,802	3,090	3,245	3,407	3,577
Property	1,789	2,062	2,371	2,466	2,614
Other Objects	292	298	304	310	316
TOTAL	$31,565	$33,641	$35,152	$36,726	$38,659
REVENUES					
Local Taxes	$18,152	$19,598	$21,133	$22,441	$23,883
Other Local Revenue	2,005	2,119	2,225	2,314	2,383
State Aid	10,190	10,610	10,928	11,365	11,820
Federal Aid	1,218	1,015	1,015	1,035	1,056
TOTAL	$31,565	$33,641	$35,301	$37,156	$39,142
ENDING FUND BALANCE	$1,556	$1,257	$1,406	$1,836	$2,320
ASSESSED VALUATION	$327,400	$335,800	$339,200	$346,000	$352,900
MILLAGE	55.4	58.4	62.3	64.9	67.7
Annual Changes	Mills	2.9	3.9	2.6	2.8
	%	5.3%	6.8%	4.1%	4.3%

Projected % changes	Actual 1997-98	Projected 1998-99	Projected 1999-00	Projected 2000-01
Salaries	6.3%	3%	4%	5%
Benefits	5.1%	5%	5%	6%
Professional Services	11.3%	5%	5%	4%
Property Services	1.9%	5%	6%	6%
Other Purch. Services	19.2%	3%	3%	2%
Supplies	10.3%	5%	5%	5%
Property	15.3%	15%	4%	6%
Other Objects	2.1%	2%	2%	2%
Other Local Revenue	5.7%	5%	4%	3%
State Aid	4.1%	3%	4%	4%
Federal Aid	-16.7%	0%	2%	2%
Ending Fund Balance (% of Total Exp)	3.7%	4%	5%	6%
Assessed Valuation	2.6%	1%	2%	2%

Table 8.4 provides an example of a forecast model, which uses the major revenue sources and objects of expenditure along with district fund balances to project the annual property tax millage required for each of the next three years. The model allows the user to select an annual percent increase for each of the revenue (except Local Taxes) and expenditure categories, for assessed valuation of taxable property, and a district policy for ending fund balance in terms of a percent of total expenditures. As shown, the percent changes can vary from year to year for the same category—and can be negative. The model then calculates the projected revenue and expenditure amounts based on the chosen percent changes, level of ending fund balance needed to meet the district policy, and amount of local taxes needed to balance the budget. The local tax amount is translated into millage, and the annual changes in millage are calculated. The impact of changing any of the variables in the model can be seen by simply entering another value for the selected category.

Special Analyses and Reports

At times during the school year there is often a need for some special analysis or study of a particular issue. These are not routine events, but occur sporadically in response to a special situation. If the investigation involves quantitative analysis, it may be helpful to carry out that portion with a spreadsheet model. If appropriate, graphic displays can be developed to demonstrate important points. While the four examples discussed below are illustrative only and not intended to be exhaustive, they do provide an indication of the possibilities.

New program cost estimation. Decision-makers need to know the estimated cost when considering a new program proposed for the district. One cost estimation method is the resource-cost model approach,[9] which requires the analyst to specify the type and quantity of resources appropriate for the new program and the prices of those resources, and then uses these data to derive the resultant program cost. An example of a resource-cost model format is shown in Table 8.5.

The format of this methodology fits naturally into a budget format and an electronic spreadsheet. Estimates of not only the first year's costs but also the following years' costs can be developed to provide an indication of ongoing operating costs. Similar analyses can be carried out for major modifications proposed to existing programs.

Cost-effectiveness comparisons. When the district is faced with deciding among alternative approaches for solving the same problem or accomplishing the same objective, a standard course is to conduct a cost-effectiveness analysis.[10] This consists of collecting all of the comparable costs of each approach along with the

9. For a description of the resource-cost model methodology, see William Hartman, "Projecting Special Education Costs," in Jay Chambers and William Hartman, eds., *Special Education Policies: Their History, Implementation, and Finance* (Philadelphia, PA: Temple University Press, 1983).

10. Henry M. Levin, *Cost-Effectiveness: A Primer* (Beverly Hills, CA: Sage Publications, 1983).

TABLE 8.5

Resource-Cost Model Example

Estimated Expenditures for New Special Education Class for Visually Impaired Students

Instructional Placement	Resources	Prices		
		1998-99	1999-00	2000-01
Special Class	Teacher	$38,000	$39,140	$40,314
	Aide	$10,000	$10,300	$10,609
	Substitute Cost	$500	$515	$530
	Benefits	$14,400	$14,832	$15,277
	Supplies *	$2,000	$500	$515
	Equipment *	$5,000	$300	$309
	Maint. & Op.	$1,200	$1,236	$1,273
	Total	$71,100	$66,823	$68,828
Annual Cost Increase			3.0%	3.0%

* *Estimated first year startup costs are larger than ongoing class costs.*

Projected Program Costs	1998-99	1999-00	2000-01
Number of Students	24	26	27
Students per Class	8	8	8
Classes Required	3	3	3
Program Costs	$213,300	$200,469	$206,483
Cost per Student	$8,888	$7,710	$7,648

anticipated results produced by each. The approaches are compared to see which produces the greatest results for the same amount of expenditure or equivalent results for the least expenditure.

Setting this type of analysis up on an electronic spreadsheet facilitates not only the calculations, but, more importantly, requires the thorough delineation of the relevant costs and results. Cost-effectiveness analyses can be developed not only for support service and administrative operations, but are also quite helpful in examining instructional alternatives. An educational example is given in Table 8.6.

TABLE 8.6

Cost-Effectiveness Example

Costs of Reducing Dropouts for Three Alternative Programs

Alternative	Total Cost	Number of Dropouts	Dropouts Prevented	Cost per Dropout Prevented	Teacher Attitudes
A	$12,750	18	17	$750	Resistant
B	$12,375	20	15	$825	Enthusiastic
C	$13,500	25	10	$1,350	Neutral
Control Group	-	35	-	-	-

Source: Henry M. Levin, Cost-Effectiveness: A Primer (Beverly Hills, CA: Sage Publications, 1983), p. 136.

Make or buy decisions. At times the district may be trying to decide whether to perform an activity itself or to contract with an outside vendor for the service. This is the classic *make* (do it internally) or *buy* (purchase it externally) decision situation. While not all the important factors to be considered are quantifiable, many are—particularly the costs. An electronic spreadsheet developed for the specific problem can identify and compare the costs and the anticipated results for each alternative and facilitate the decision making process.

Election analysis. For those districts needing elections for budget approval, tax levies, or bond issues, post-election analysis of voter behavior can be very enlightening and prove quite helpful in future elections. A precinct-by-precinct analysis to correlate the percent of "Yes" voters with voter characteristics (e.g., number of voters with children in school, age, income, average assessed value of residential property, and previous voting record) will identify possible relationships which could be used in upcoming elections. Also, if different tactics were tried in different precincts, an analysis of the results could reveal those which were most effective in reaching certain types of voters.

Final Comments

A critical point to remember is that the budget and the related management and analytical reports are simply tools for administrators to utilize. Dollars are obtained and allocated through the budgeting process to carry out educational programs.

Resources are reallocated during the year to meet newly emerging needs, to take advantage of opportunities, and to motivate staff. The budgets and reports are a blueprint for educational planning and a language for describing operations and activities of the district. Consequently, administrators must know what the budgets and management reports are, what content is included in each, and how to interpret and use the information they contain.

If, as an administrator, you don't control your budget, then it will control you! The best administrators know this secret and use budgets and financial information to achieve the maximum for their educational programs.

Problems

In solving all of the problems listed for this chapter use an electronic spreadsheet and construct the designated models or graphs needed to provide the information or answer the questions asked.

1. Construct your district's current salary schedule for teachers. (Use formulas to relate all other salary levels to the base/entry salary amount.) Show what the schedule would be next year with increases of 2 percent, 5 percent, and 10 percent in the base salary level.

2. Design an expenditure reporting system to keep track of departmental expenditures and encumbrances in a high school in your district. Illustrate its operation with actual or hypothetical data from one academic or administrative department.

3. Create two graphs to illustrate budget data. Use your district's budget data (or devise hypothetical, but reasonable data if actual data are not available).
   a. A pie chart showing distribution of expenditures by major category for the new budget year.
   b. A line graph showing revenue trends by major source of revenue for the past five years.

4. Using your district's budget data, develop a budget forecast for the next three years. Include major expenditure categories (functions or objects based on your district's budget document) and major revenue categories (sources from your district's budget document). To simplify matters, assume no change in fund balance over the forecast period. For a more advanced model, include changes in fund balance to match district policy on fund balance level. Construct the model to allow different percent changes for each account in each year. Also, have the model calculate the

millage that would result from your projections.

Conduct a sensitivity analysis to modify your original expenditure percent changes in order to have millage increases limited to no more than 4 percent per year.

Notes

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